

Oxford Centre for Respiratory Medicine, Churchill Hospital

## Aminoglycosides: Gentamicin and Tobramycin

- Sometimes we need to use two antibiotics, one of which will be an aminoglycoside.
- These antibiotics have an ability to kill a wide range of bacteria, including *Pseudomonas aeruginosa*.
- The blood level of these antibiotics has to be measured to ensure the dose you are taking is high enough to fight the infection but not too high to cause potential side effects.

### Tests required during IV aminoglycoside courses

- Antibiotic blood levels have to be measured at specific times depending on whether you are taking this 3 times a day or once a day:
  - The blood levels for **ONCE DAILY GENTAMICIN or TOBRAMYCIN** have to be taken 6-14 hours after a specified dose. The first level is taken after the second dose, with repeat blood level monitoring after the seventh dose.
  - The first blood level for **THREE TIMES A DAY GENTAMICIN or TOBRAMYCIN** has to be taken just before the **FOURTH** dose is given (this is called a **TROUGH** level) with repeat blood level monitoring on day 7.
- It is important you know the time of your last dose and let us know this when you attend for your blood test.
- When we have the results, the dose of this antibiotic

might need to be increased or decreased so that you gain the maximum benefit from the course of IV antibiotics with minimal side effects. The CF/bronchiectasis nurses will contact you if this is necessary.

### **What are the possible side effects of gentamicin?**

If you experience any of the following serious side effects, stop taking gentamicin and seek emergency medical attention:

- An allergic reaction - shortness of breath; closing of the throat; hives; swelling of the lips, face tongue; rash; or fainting
- Little or no urine
- Decreased hearing or ringing in the ears
- Dizziness, clumsiness or unsteadiness
- Numbness, skin tingling, muscle twitching or seizures
- Severe watery diarrhoea

Other, less serious side effects may be more likely to occur. Continue to take gentamicin and talk to the CF/Bronchiectasis team if you experience:

- Increased thirst
- Loss of appetite
- Nausea or vomiting
- A rash

Side effects other than those listed above may also occur. Talk to a member of the CF/Bronchiectasis team about any side effect that seems unusual or that is especially bothersome.