

## PYELONEPHRITIS

This guideline provides support for IV therapy management in the community following failure of oral antimicrobial therapy as appropriate. This is to be used for guidance only and should not replace clinical judgment.

If judged to require more than oral antibiotics:

- Administer a stat dose (once only) of Gentamicin IV, 3.5mg/kg in a normal saline infusion - a minimum of 100ml infused over 30 minutes.
- Pharmac regulations regarding both gentamicin and ciprofloxacin requiring “specialist approval” still apply.
- Start oral ciprofloxacin (500mg bd for 7 days).
- If patient does not respond to the stat dose then consult with the appropriate clinician at the HBDHB.

The following is a copy of the HBDHB guidelines for one dose only

### FOR ONE DOSE ONLY

The first dose is usually between 3-5mg/kg depending on the renal function and the nature of the illness of the patient.

The consultant in charge of the patient will advise on the appropriate dose to be given but as a guideline:

#### 1. The patient's creatinine clearance (CrCl) needs to be calculated:

$$\text{CrCl (mL/second)} = \frac{(140 - \text{age (years)}) \times \text{lean body weight (kg)}}{\text{serum creatinine (micromole/L)} \times 50^*} \quad (\times 0.85 \text{ if female})$$

\* (0.833 for mL/minute)

Lean body weight (kg) males = 50kg + 0.9 kg for each cm > 150 cm in height.  
Lean body weight (kg) females = 45kg + 0.9 kg for each cm > 150 cm in height.

#### 2. From Table (1) calculate the initial dose:

Table 1

CrCl (mL/second)	CrCl (mL/minute)	Dose (mg/kg)
>1.1	65	5, 6, 7
0.91 – 1.1	55 – 65	5 – 6
0.71 – 0.9	43 – 54	5
0.51 – 0.7	31 – 42	4
0.35 – 0.5	20 – 30	3
<0.35	<20	Consider using another antibiotic

### Gentamicin Supplies

- CPO will supply each practice with Gentamicin for their medication cupboard. Gentamicin is stocked by CPO pharmacies for use as above. Replenish stock with a patient prescription from one of the CPO pharmacies as used.
- Intravenous normal saline is available in 500ml and 1L bags through the medical practitioners supply order (PSO) form.

CPO will fund the administration of the IV Gentamicin and a follow up appointment, as required.