

AMINOPHYLLINE – IV

Bolus and infusion

Available as: Aminophylline 25 mg / ml (10 ml ampoules)

Preparation:

- 1) Remove 20 ml from 500 ml bag of 0.9% Sodium Chloride
- 2) Draw up 500 mg of aminophylline [= 20 ml], add to 480 ml bag of 0.9% Sodium Chloride to get a concentration of 1 mg / ml
- 3) Mix well and run through a giving set

For an obese child, calculate dose on the basis of ideal weight for height.

Dose as an initial loading dose:

1 month – 18 years: 5 mg / kg (max. 500 mg) = 5 ml / kg

Administer the prescribed dose OVER at least 20 MINUTES

Do not give a loading dose of aminophylline if child is already on theophylline or aminophylline

Dose as a subsequent infusion:

1 month – 12 years: 1 mg / kg / hour

12 – 18 years: 500 – 700 micrograms / kg / hour

**Adjust dose according to plasma theophylline levels
(10 – 20 mg/L or 55 – 110 micromol/L)**

Observations:

Nurse on cardiac monitor. Observe for tachycardia, arrhythmias.
Too rapid an infusion can cause hypotension, arrhythmias, and convulsions.

There is a narrow margin between therapeutic and toxic dose.

Signs and symptoms of overdose include: vomiting, agitation, restlessness, dilated pupils, tachycardia, and hyperglycaemia. Also haematemesis, convulsions, arrhythmias, and severe hypokalaemia.