

Atropine is a competitive muscarinic antagonist and is also used as a positive chronotrope

Indications

Organophosphate & carbamate poisoning

Poisoning by agents that impair AV conduction:

- Calcium Channel Blocker (CCB) toxicity
- Beta blocker toxicity
- Cardiac glycosides

Initial Rx of clonidine-induced hypotension with associated bradycardia

Contraindications

Anticholinergic toxicity

Closed angle glaucoma (relative CI)

Adverse effects:

Anticholinergic excess: delirium, tachycardia, mydriasis, urinary retention

Presentation

- 0.6 mg/mL Poly amp OR 1.2 mg/mL Poly amp
- Compatible fluids: Glucose 5%, Compound Sodium Lactate (CSL), Plasma-Lyte 148, Sodium Chloride 0.9%, Glucose 4% and NaCl 0.18%

Dose and Administration (*Cardiac monitoring is mandatory during administration*)

Organophosphate, nerve agent (acetylcholinesterase inhibitor) & carbamate poisoning

Administer to all patients with muscarinic symptoms (very large doses may be required):

- 1.2 mg (0.05 mg/kg children, up to 1.2mg) IV bolus and double dose every 5 minutes
- Continue IV boluses until *adequate atropinisation* is achieved:

HR > 80 bpm, systolic BP > 80 mmHg, chest clinically clear

- Once adequate atropinisation is achieved, commence atropine infusion: 10-20% of the total dose required to achieve adequate atropinisation per hour. Rare to exceed 3-5mg/hour atropine per hour.
- Titrate to effect and monitor for possible anticholinergic toxicity (confusion, pyrexia, absent bowel sounds)

Bradycardia with CVS compromise (hypotension) caused by drug-induced AV conduction blockade

- 0.6mg (0.02 mg/kg children, up to 0.6mg) IV bolus and repeat dose 15 minutely up to 1.8 mg as required

Pregnancy: Safe to use in pregnancy