**ATROPINE**

**Indication**
- Reversal of severe sinus bradycardia
- Prevention of bradycardia in conjunction with use of medications known to cause bradycardia (e.g. suxamethonium)
- Reduce the muscarinic effects of neostigmine when reversing neuromuscular blockage

**Presentation**
- Ampoule 600 microgram/mL | 1.2 mg/mL (1200 microgram/mL)

**Dosage**
- 20 microgram/kg
  - Dose can be repeated after 10 to 15 minutes to achieve desired effect
  - Maximum cumulative dose 40 microgram/kg

**Preparation**
- 600 microgram/mL
  - Add 600 microgram (1 mL) to 11 mL of 0.9% sodium chloride
  - Concentration now equal to 50 microgram/mL

**Administration**
- Draw up the prescribed dose

**Special considerations**
- Slow IV administration may result in paradoxical bradycardia
- In an emergency, IV or IO routes are preferred. Can be given via ETT but absorption is variable and higher doses may be required
- UAC route: discuss with neonatologist/paediatrician prior to use

**Monitoring**
- Heart rate, temperature

**Compatibility**
- Fluids
  - 0.9% sodium chloride
- Y-site
  - Amikacin, amiodarone, calcium gluconate, cephazolin, cefotaxime, cefoxitin, ceftazidime, dexamethasone, digoxin, dobutamine, dopamine, adrenaline (epinephrine), fluconazole, furosemide (frusemide), gentamicin, heparin, hydrocortisone, insulin (regular), meropenem, midazolam, morphine, ondansetron, phenobarbital (phenobarbimeth), potassium chloride, ranitidine, sodium bicarbonate, vancomycin

**Incompatibility**
- Drugs
  - Ampicillin, flucloxacillin, phenytoin, trimethoprim-sulfamethoxazole (co-trimoxazole)

**Interactions**
- Potentiates effects (therapeutic and/or adverse) if given with other anticholinergic drugs

**Stability**
- Store below 25 °C
- Single use only. Discard residual after opening

**Side effects**
- Cardiac arrhythmias (particularly in the first 2 minutes), fever, abdominal distention with reduced bowel activity, oesophageal reflux and mydriasis
- Increases heart rate, inhibits smooth muscle contraction in the gastrointestinal and genitourinary systems
- Inhibits salivary and bronchial secretions
### Abbreviations
ETT: endotracheal tube; IM: intramuscular; IO: intraosseous; IV: intravenous; UAC: umbilical arterial catheter

### Keywords
Intubation protocol, bradycardia, rapid sequence intubation, atropine, atropine sulfate

### Quick guide

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<tr>
<th>Atropine dose 20 microgram/kg</th>
<th>Round weight to nearest 0.5 kg</th>
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<tr>
<td>Use 50 microgram/mL reconstituted concentration</td>
<td>0.5 kg</td>
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<tr>
<td>Dose (microgram) for approx. weight</td>
<td>10 mcg</td>
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<tr>
<td>Administration volume (mL)</td>
<td>0.2 mL</td>
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The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

### References

### Document history

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