

# Atropine

## Newborn use only

2019

<b>Alert</b>	
<b>Indication</b>	Prevention of reflex bradycardia during elective endotracheal intubation. Preanaesthetic medication to prevent perioperative adverse events.
<b>Action</b>	Competitively inhibits acetylcholine at muscarinic acetylcholine receptors, decreases the effects of the parasympathetic nervous system and increases the effects of the sympathetic nervous system. Increases heart rate with a peak effect in 2–4 minutes after IV administration. Salivary secretion and intestinal and gastric motor activity are decreased for up to 6 hours. Bronchial smooth muscle relaxes, decreasing airways resistance.
<b>Drug Type</b>	Anticholinergic
<b>Trade Name</b>	Atropine sulphate
<b>Presentation</b>	Vial for injection – 600 microgram/1 mL ampoule.
<b>Dosage/Interval</b>	<b>Intubation</b> IV, IM: 10 microgram/kg/dose (range 10–20 microgram/kg/dose)  <b>Preanaesthetic medication</b> PO: 20 microgram/kg/dose 1 hour prior to induction of anaesthesia (range 20–40 microgram/kg/dose).
<b>Route</b>	PO, IV, IM
<b>Preparation/Dilution</b>	IV, IM or PO: Draw up 1 mL (600 microgram of atropine) and add 5 mL WFI to make final volume 6 mL with a concentration of 100 microgram/mL.
<b>Administration</b>	IV slow bolus Administer orally with or without feeds Can be repeated after 5 minutes if required.
<b>Monitoring</b>	Continuous cardiorespiratory monitoring. Monitor temperature and abdominal distension.
<b>Contraindications</b>	Hypersensitivity to atropine. Arrhythmias, tachycardia, congenital glaucoma, intestinal obstruction, obstructive uropathy, asthma.
<b>Precautions</b>	Fever — in febrile patients or patients exposed to elevated ambient temperature, there is risk of provoking hyperpyrexia and heat prostration Gastro-oesophageal reflux
<b>Drug Interactions</b>	The hypertensive and cardiac arrhythmic adverse effects of phenylephrine absorbed from eye drops can be significantly increased by systemic atropine. There is increased risk of antimuscarinic side effects if atropine is used in combination with antihistamines (e.g. promethazine, cyclizine), codeine or phenothiazines (e.g. prochlorperazine). Atropine antagonises the gastrointestinal motility promoting effects of domperidone and metoclopramide. May increase serum concentrations of thiazide diuretics e.g. hydrochlorothiazide. Reduces the absorption of ketoconazole. Increases the absorption of nitrofurantoin. May increase the risk of opioid-induced constipation and urinary retention. Anticholinergic agents, including atropine, may increase the toxic side effects of topiramate.
<b>Adverse Reactions</b>	Tachycardia, arrhythmia, hyperthermia, flushing, irritability, abdominal distension, oesophageal reflux with decreased oesophageal sphincter tone, decreased gut motility, urinary retention, dry mouth.
<b>Compatibility</b>	Fluids: sodium chloride 0.9%  Y-site: Adrenaline (epinephrine), amikacin, aminophylline, amiodarone, calcium chloride, calcium gluconate, cefazolin, cefotaxime, ceftazidime, cefuroxime, ceftriaxone, chlorothiazide, clindamycin, dexamethasone, digoxin, dopamine, dobutamine, erythromycin, famotidine, fentanyl, fluconazole, folic acid, furosemide (frusemide), gentamicin, glycopyrronium bromide (glycopyrrolate), heparin,

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	hydrocortisone sodium succinate, imipenem, indometacin, insulin, lidocaine (lignocaine), magnesium sulfate heptahydrate, meropenem, methadone, metoclopramide hydrochloride, morphine sulfate pentahydrate, midazolam, nafcillin, naloxone, noradrenaline (norepinephrine), benzylpenicillin, phenobarbital (phenobarbitone), piperacillin, potassium chloride, , propranolol, pyridoxine, sodium bicarbonate, ranitidine, theophylline, tobramycin, vancomycin
<b>Incompatibility</b>	Y-site: Ampicillin, diazoxide, diazepam, flucloxacillin, hydralazine, pantoprazole, phenytoin, propofol, sulfamethoxazole-trimethoprim, thiopentone
<b>Stability</b>	Use once and discard residual.
<b>Storage</b>	IV – unopened vials stable at room temperature (20–25°C). Protect vial from light.
<b>Special Comments</b>	Atropine toxicity – treat anticholinergic symptoms with physostigmine (0.01–0.04 mg/kg/dose) by slow IV infusion.
<b>Evidence summary</b>	Refer to full version.
<b>References</b>	Refer to full version.

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<b>Approval by:</b> As per Local policy	<b>Approval Date:</b>