Clinical Guideline
Atropine

Policy developed by: SA Maternal, Neonatal & Gynaecology Community of Practice
Approved SA Health Safety & Quality Strategic Governance Committee on: 9 November 2017
Next review due: 9 November 2020

Summary
The purpose of this guideline is to guide nursing, medical and pharmacy staff in the dosing and administration of atropine

Keywords
Atropine, neonatal medication guideline, hyoscyamine, atropine sulphate, respiratory depression, convulsions, coma, bradycardia, intubation, reversal, pancuronium, suxamethonium, vecuronium, mydriasis, cycloplegia, arrhythmias, tachycardia

Policy history
Is this a new policy? N
Does this policy amend or update an existing policy? Y v1.0
Does this policy replace an existing policy? N
If so, which policies?

Applies to
All SA Health Portfolio
All Department for Health and Ageing Divisions
All Health Networks
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS

Staff impact
All Clinical, Medical, Midwifery, Nursing, Students, Allied Health, Emergency, Mental Health, Pathology, Pharmacy

PDS reference
CG013

Version control and change history

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Note

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient’s medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

This is a High Risk Medication

An overdose will cause respiratory depression, convulsions and coma.

Synonyms

Hyoscyamine, atropine sulphate

Dose and Indications

Pre-medication for intubation

Intravenous

10 - 20micrograms/kg/dose immediately prior to the administration of suxamethonium

Prevention of muscarinic effects of neostigmine (e.g. reversing neuromuscular blockade, myasthenia gravis test)

Intravenous

20microgram/kg/dose, immediately prior to neostigmine (see neostigmine dosing guidelines)
Preparation and Administration

Intravenous

Dilute 1mL of the 600 microgram/mL atropine injection with 5mL sodium chloride 0.9% (to a total volume of 6mL). The resulting solution contains 100microgram/mL atropine.

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<tr>
<th>Dose</th>
<th>10micrograms</th>
<th>20micrograms</th>
<th>40micrograms</th>
<th>60micrograms</th>
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<tr>
<td>Volume</td>
<td>0.1mL</td>
<td>0.2mL</td>
<td>0.4mL</td>
<td>0.6mL</td>
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Administer intravenously (IV) over at least 1 minute
Discard any remaining solution

Compatible Fluids

Sodium chloride 0.9%

Adverse Effects

Common
Tachycardia, photophobia, constipation, urinary retention, flushing, fever, arrhythmias (especially in first 2 minutes following IV administration), oesophageal reflux

Infrequent
Vomiting, headache, paralytic ileus, rash

Rare
Closed angle glaucoma, seizures

Monitoring

Cardiorespiratory monitoring is mandatory for systemic use

Practice Points

Atropine is not generally required as a premedication for intubation with suxamethonium
Atropine and suxamethonium or neostigmine must be given in separate syringes if administered at the same time
Neonates are especially susceptible to the toxic effects of atropine. Overdose can occur easily resulting in respiratory depression requiring ventilation or paralytic ileus requiring IV therapy.
Do not mix with sodium bicarbonate.
Contraindicated in urinary tract obstruction, thyrotoxicosis, fever, ileus, pyloric stenosis and closed angle glaucoma.
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**PDS reference:** OCE use only

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