Hyoscine Hydrobromide – Palliative Care

These guidelines are for use in Palliative Care ONLY.

Note that Hyoscine Hydrobromide can cause excessive sedation. Hyoscine N-Butylbromide can be used as an alternative but note the difference in doses.

Important: Ensure that you have the correct Hyoscine preparation as multiple products exist.

Presentation
Hyoscine hydrobromide 400mcg/ml ampoules.
Scopalamine Patch (hyoscine hydrobromide) 1.5mg (Scopoderm TTS).

Indications
- Licensed: Nausea and vomiting resulting from motion sickness, drying secretions (surgical premedication)\(^1,2\)
- Unlicensed: Drying secretions – “death rattle” or sialorrhoea\(^7\).
  (Best avoided in conscious patients as causes drowsiness and can cause delirium).

Dose

| Subcutaneous (Subcut) | Usual dose for excessive secretions: 400mcg (0.4 mg) subcut stat, continue with 1200mcg (1.2mg)/24hr via continuous subcutaneous infusion (CSCI)\(^7\). 400mcg subcut q4-8 hourly can be used PRN\(^3\)  
If hyoscine hydrobromide is effective, it can be used in a CSCI to a maximum of 2000mcg (2mg)/24 hours.\(^7\) |
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<td>Patches (Scopoderm TTS)</td>
<td>One patch releases 1mg of scopolamine over 72 hours.(^2)</td>
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Diluent
- For subcutaneous bolus administration hyoscine hydrobromide does not need to be diluted.\(^5\)
- When added to a syringe driver the recommended diluent is water for injection unless otherwise indicated.\(^7\)

Additional Equipment
- Subcutaneous Saf-T-Intima single lumen [ADM140] (WDHB Policy Palliative Care- Subcut Site Selection and Insertion of BD Saf-T-Intima)
- Continuous subcutaneous infusion (CSCI) via Niki T-34 pump if required.

Compatibility
Water for injection, 0.9% sodium chloride, dexamethasone, morphine sulphate, haloperidol, cyclizine, metoclopramide, methadone, midazolam, clonazepam, octreotide, fentanyl, oxycodone, levomepromazine.\(^3,6,7,8\)

\(^1\) Best avoided in conscious patients as causes drowsiness and can cause delirium.
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Administration

| Subcutaneous (Subcut) | • Can be injected directly by a subcutaneous needle or through a Saf-T-Intima that has already been placed.  
| | • The Saf-T-intima should be flushed with 0.2ml of water for injection after administration.  
| | Can be administered via a continuous subcutaneous infusion (CSCI) via Niki T-34 pump  
| Patches (Scopoderm TTS) | One patch should be applied to a dry hairless area of intact skin behind the ear. This should be removed and replaced every 72 hours.  

Observation and Monitoring

- Hyoscine hydrobromide crosses the blood brain barrier.  
- Patients need to be monitored for excessive drowsiness, agitation, urinary retention and constipation.  
- Paradoxical agitation can occur.

Mechanism of Action

Hyoscine hydrobromide is an anti-muscarinic. It acts on smooth muscle as a relaxant and has anti-secretory properties. It is also thought to have a central anti-emetic action.

Contraindications and Precautions

Contraindications

- Narrow-angle glaucoma  
- Hypersensitivity to hyoscine hydrobromide  
- Prostatic hypertrophy  
- Pyloric obstruction  
- Paralytic ileus  
- Tachycardia  
- Urinary bladder neck obstruction

Precautions

- Elderly  
- Urinary retention  
- Cardiovascular disease  
- Myasthenia Gravis

Possible adverse effects

- Drowsiness  
- Sedation  
- Hallucinations  
- Delirium  
- Excessive dry mouth  
- Dizziness  
- Blurred vision  
- Urinary retention  
- Constipation  
- Central anticholinergic syndrome  
- Tachycardia
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Drug Interactions
- Anticholinergic agents
- Antihistamines
- CNS depressants
- Monoamine oxidase inhibitors
- Phenothiazines
- Tricyclic antidepressants
- Competitively blocks the action of prokinetic agents, e.g. metoclopramide and domperidone

References
2 Scopoderm Patient Information sheet, Novartis Consumer Health Australasia Pty Ltd, Auckland, New Zealand.
6 Smith, S. Compatibility of syringe driver admixtures for continuous subcutaneous infusion, Pharmacy Department Auckland Hospital 2002.