Hyoscine N-Butylbromide (Buscopan) Subcutaneous – Palliative Care

These guidelines are for use in Palliative Care ONLY.
Multiple products exist – Please ensure you have the correct Hyoscine preparation. Note that Hyoscine Hydrobromide has similar properties and indications.

Presentation
Hyoscine N-Butylbromide (Buscopan) 20mg/ml ampoules.

Indications
- **Licensed:** Smooth muscle spasm of the gastro-intestinal tract (intestinal colic).¹
- **Unlicensed:** Drying secretions, sialorrhoea (drooling), genitourinary colic, inoperable bowel obstruction.²

Dose

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| As needed (PRN) | 20mg q1-2 hourly subcutaneous (subcut) – up to a maximum of 120mg/day.²  
It can be used orally but is thought to be almost ineffective as it has an oral bioavailability of less than 1%.² |
| Continuous SC Infusion via Syringe Driver |  
**Death Rattle** – 20mg subcut stat, 20-60mg/24hr via continuous subcutaneous infusion (CSCI), and/or 20mg subcut q1hr prn  
Bowel obstruction with colic – 20mg subcut stat and 60mg/24hr via continuous subcutaneous infusion (CSCI).  
Up to 120mg/24 hours can be used². |

This medication is licensed to a maximum of **100mg per day** in New Zealand¹ but often is used in higher doses after consultation with the Palliative Care Team (up to 300mg over 24 hours).²

Diluent
- For subcutaneous bolus administration Hyoscine N-Butylbromide does not need to be diluted.³
- When added to a syringe driver the recommended diluent is water for injection.²

Additional Equipment
- Subcutaneous Saf-T-Intima single lumen [ADM140] (See WDHB policy Palliative Care - Subcutaneous Site Selection and Insertion of BD Saf –T- Intima Cannula).
- Continuous subcutaneous infusion pump (CSCI) (Niki T34 or equivalent) if required.

Compatibility
- Water for injection, 0.9% sodium chloride, morphine sulphate, morphine tartrate, haloperidol.⁴
- Levomepromazine, midazolam, metoclopramide, clonazepam, octreotide, fentanyl, oxycodone, dexamethasone.⁵
- Concentration dependent incompatibility with cyclizine²
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Administration

• Should be injected through a Saf-T-Intima or directly by a subcutaneous needle.
• The Saf-T-Intima should be flushed with 0.2ml of water for injection after administration of medication.
• Can be administered via a continuous subcutaneous infusion pump (Niki T34 or equivalent).

Observation and Monitoring

Monitor for dry mouth, urinary retention and constipation.

Mechanism of Action

Hyoscine N-Butylbromide is an anti-muscarinic agent with smooth muscle relaxant and anti-secretory properties. It does not cross the blood brain-barrier.\(^3\)

Drug Interactions

• Anticholinergic agents
• Antihistamines
• Monoamine oxidase inhibitors
• Tricyclic antidepressants
• Competitively blocks prokinetic agents (i.e. metoclopramide, domperidone)\(^1\)

Contraindications and Precautions

Contraindications

• Narrow-angle glaucoma (unless moribund)
• Myasthenia Gravis
• Hypersensitivity to hyoscine N-butylbromide
• Megacolon
• Prostatic hypertrophy with urinary retention
• Mechanical gastrointestinal stenosis
• Tachycardia\(^3\)

Precautions

• Elderly
• Urinary retention
• Cardiovascular disease\(^1\)

Possible Adverse Effects

• Dry mouth
• Dizziness
• Blurred vision
• Urinary retention
• Constipation
• Tachycardia\(^1\)
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References

1. Medsafe Website – Buscopan Datasheet.


   (http://book.pallcare.info/)