

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

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 used ² .

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
- Tachycardia³

Precautions

- Elderly
- Urinary retention
- Cardiovascular disease¹

Possible Adverse Effects

- Dry mouth
- Dizziness
- Blurred vision
- Urinary retention
- Constipation
- Tachycardia¹

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References

1	Medsafe Website – Buscopan Datasheet . http://www.medsafe.govt.nz/profs/Datasheet/b/Buscopantabinj.pdf
2	Twycross R, Wilcock A (eds). Palliative Care Formulary 4 th edition. Palliativedrugs.com Ltd. 2011
3	McClintock A, (ed) Notes on Injectable Drugs 5 th Edition 2004. New Zealand Healthcare Pharmacists' Association Wellington, NZ.
4	Smith, S. Compatibility of syringe driver admixtures for continuous subcutaneous infusion, Pharmacy Department Auckland Hospital 2002.
5	Back I (eds). Palliative Medicine Handbook (Online Edition). BPM Books, Cardiff, UK. (http://book.pallcare.info/)

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