



CLINICAL GUIDELINE

Intrathecal Opioid, Queen Elizabeth University Hospital

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.


Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

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	Acute Pain Service Guidelines (Adult/Surgical) Intrathecal Opioids	Review Date	January 2026
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Introduction

Intrathecal or spinal opioids are administered directly into the cerebrospinal fluid in the subarachnoid space to provide post-operative analgesia as a 'once only' dose.

Irrespective of route of administration, opioids may cause sedation, respiratory depression, nausea, vomiting, itch and urinary retention. However, there is a risk of delayed onset respiratory depression with intrathecal opioids, the time of greatest risk is approximately 8-10 hours after injection but can occur much later. For this reason patients who have received intrathecal opioids must be closely monitored.

Intrathecal opioids commonly used :-

Drug	Dose Range	Onset	Duration
Morphine (must be preservative free product)	100 – 250mcg	15-30 minutes	8-24 hours
Diamorphine	100 – 400mcg	5 minutes	10-20 hours
Fentanyl	20 – 30mcg	5 minutes	1-4 hours

Patients exceeding a dose of 250mcg of morphine or 400mcg diamorphine **must** be nursed in HDU. When deciding a dose of intrathecal opioid, it's important to consider a patient's age, weight and co-morbidities (eg. liver dysfunction, renal dysfunction, morbid obesity, COPD, OSA, elderly). Doses higher than 300 mcg of intrathecal morphine may be associated with increased risk of side-effects with no further analgesic benefit.

Patient observations

- Intrathecal opioids should only be used in clinical areas where nursing staff are knowledgeable in the identification and management of side effects and complications.
- All patients should receive supplementary oxygen until at least 08:00 hours the following morning.
- Respiratory rate, sedation score, pain score, nausea and vomiting score should be recorded hourly for 24 hours from the time of administration.
- Patient's observations must be recorded **either** on the Intrathecal Opioid Analgesia chart **or** a Patient Controlled Analgesia (PCA) chart if the patient is receiving PCA.

3 hours after return to ward, nurse MUST check motor block is resolving. If motor block has not resolved, contact duty anaesthetist (83464) for urgent patient review to exclude spinal haematoma/abscess.

- If the patient is asleep this should be noted on the observation chart with an "S" but the respiratory rate must still be recorded.
- Intravenous access must be available for 24 hours following the administration of intrathecal opioids.
- It is the responsibility of the anaesthetist to prescribe additional opioids if required.
- If prescribing long acting opioids, consider the dose and timing.
- Please ensure that a **"Warning. This patient has received Intrathecal Opioids"** sticker is attached to the patient's anaesthetic chart and PCA chart if applicable.
- Prescribe the patient's intrathecal dose of opioid on HEPMA. This will generate an alert to staff dispensing medications to be aware intrathecal opioid has been given and also will generate oxygen and naloxone prescriptions.
- Anticoagulation (eg DVT Prophylaxis) can be given after a minimum of 4 hours after spinal injection.
- Complete the yellow intrathecal opioid chart.

Possible complications

Problem	Action
Inadequate analgesia	Ensure that Paracetamol, NSAID have been prescribed and administered (if no contraindications). Ensure a strong short-acting opioid (i.e. Oramorph or Shortec) has been prescribed and administered (if no contraindications). If pain is not controlled appropriately, consider commencing a PCA. If PCA in situ, check PCA is functioning and patient is using optimally.
Respiratory Depression (Excessive Sedation)	If sedation score = P and respiratory rate less than 8, consider administration of Naloxone. If sedation score = U (irrespective of respiratory rate), give 200 micrograms of Naloxone IV. Repeat with 100 micrograms every 2 minutes as required according to response. Contact acute pain service or duty anaesthetist.
Nausea and vomiting	As per GG&C guidance, give 1st line anti-emetic. If ineffective give 2nd line anti-emetic. If still ineffective contact the acute pain service or duty anaesthetist. In the elderly >70 years consider halving the usual dose of prochlorperazine or cyclizine. Consider other possible causes (i.e. ileus).
Itch	Consider Ondansetron 4mg (oral or IV) first line, then Chlorphenamine 4mg orally or 10mg IV. (N.B. antihistamine may be ineffective and can increase risk of over-sedation). If the above interventions are ineffective consider a low dose of Naloxone as per Acute Pain guidelines

Hypotension	Observe for hypovolaemia and other causes of hypotension Contact ward doctor to exclude and treat cause. They may consider contacting the duty anaesthetist.
Unresolved motor block after 3 hours of Ward Care	Contact duty anaesthetist (83464), for urgent assessment to exclude spinal haematoma/abscess.
Post dural puncture headache (Manifests as headache which is worse on sitting and better when lying. May also be associated with nausea & vomiting and photophobia).	Initial treatment is hydration and simple analgesia. Contact duty anaesthetist if these measures are ineffective. A blood patch may be indicated.
Urinary Retention	Catheterise

References

Schug, Palmer, Scott, et al; Acute Pain Management: Scientific Evidence; 5th Edition; 2020; pages 241-333