Adult (Non obstetric) Intrathecal (Spinal) Morphine

Contents

Background Information

Benefits

Intrathecal morphine (ITM) can provide significant safe analgesia for at least 12 hours and up to 24 hours if used as suggested below.

Patient Selection

ITM should not be used in patients with known sensitivities to morphine and/or a history of postoperative nausea and vomiting, advanced respiratory disease, obstructive sleep apnoea, and those already receiving high dose opioids or central nervous system depressants.

The risk of serious respiratory depression requiring intervention is low. It is increased with increasing patient age and ASA (Anaesthetic Risk Classification) states. In this regard, ITM is no different from opioids given by other routes (although ITM respiratory depression may be more prolonged).

ITM may be particularly useful for frail patients instead of an epidural with less haemodynamic disturbance.

Surgery

ITM via the lumbar spine can provide analgesia for surgery to the thorax, abdomen or lower limbs. ITM has been found to be particularly useful after total hip replacement, total knee replacement and laparotomies.

Administration

In most cases ITM will be given by the **anaesthetist** immediately prior to surgery. In some cases the addition of 25mcg of intrathecal Fentanyl plus Bupivacaine 0.5% 1-2mLs will provide analgesia within 10 minutes for up to 24 hours.

Dose

The recommended dose is 0.1 – 0.2mg (100-200mcg). As with systemic morphine, the risk of side effects increases with larger dose.

The onset of ITM is 30-60 minutes, peak effect 5-7 hours. Analgesia and adverse effects, including respiratory depression, may occur at any time for 18-24 hours after administration.

Scope

Adult patients (excluding Obstetrics), in Burwood and Christchurch Hospital Campus under the Acute Pain Management Service

Associated documents

Adult PCA Treatment Sheet and or MedChart

Anaesthetic Sheet

'Spinal Morphine' Label (available in PACU)

Adult Observation Chart/Patient Track

Naloxone Policy

Observations

All patients who receive ITM require

- A full set of observations to inform a NZEWS
- Observations at all times must include

  Hourly respirations, sedation score and oxygen saturations for 18 hours after ITM administration.

  After 18hrs, if sedation score is 0 or 1 AND respirations are greater than 10/min, then 4-hourly observations should be recorded.

- Observations should be recorded on the areas Observation Chart or in Patient Track

Emergency Management

If patient unrousable (sedation score = 3) and/or respirations less than 8 per minute, give naloxone 0.1 mg IV stat and repeat every three minutes until patient is rousable and breathing. Document naloxone dose(s) in MedChart. Administer O2, call APMS, Duty Anaesthetist stat.

In hours:

Christchurch Hospital: Nurse pager number 8114, Duty Anaesthetist pager number 8120.

Burwood Hospital: Nurse pager number 9135 and/or contact the patients SHO

After hours:

Christchurch Hospital: On call Anaesthetic Registrar pager number 8212 or ICU Registrar pager number 8155.

Burwood Hospital: Contact the on-call Anaesthetic Registrar (see Christchurch Hospital pager no.)

Requirement for Oxygen and Naloxone prescriptions

- All ITM patients should have Oxygen and Naloxone prescribed by the anaesthetist.
- These prescriptions must encompass the time frame of 18 hours **after ITM administration** due to the increased risk in this period of late respiratory depression occurring.

Patient Controlled Analgesia (PCA) Prescription

Christchurch Hospital

All patients receiving ITM must have a Patient Controlled Analgesia (PCA) prescribed by the anaesthetist, the PCA must be attached to the patient for a minimum of 18 hours.

Burwood Hospital

Patients in Burwood's Progressive Care Unit (PCU) i.e. higher nurse to patient ratio) may be managed without a PCA but they **must have the standard ITM observations recorded**. Patients administered ITM discharge from the Post Anaesthetic Care Unit (PACU) to a ward, must have a PCA attached for a minimum of 18 hours. Patients in PCU who have had ITM without a PCA must not be transferred or discharged from PCU to the ward, until 18 hours after the ITM administration.

For the first 24 hours morphine PCA prescriptions are limited to a **maximum bolus of 1mg** with a **maximum hourly total of 5mg** of morphine. Fentanyl PCA prescriptions do not need to be limited and may be prescribed with a standard bolus (20mcg) and total hourly dose.

- Background (basal) infusions via the PCA are not to be prescribed.
- The Acute Pain Management Service (APMS) will review the PCA prescription thereafter on a daily basis.

Labelling on PCA prescription form

The anaesthetist should document on the Anaesthetic treatment sheet the time and dose of ITM administered.

The anaesthetist or a delegated member of the Medical/Surgical team will inform the Recovery staff during handover in the Post Anaesthetic Care Unit (PACU) that ITM has been administered.

The PACU staff place purple 'Spinal Morphine' label in the designated space on the Adult PCA Treatment Sheet.

Burwood Hospital patients admitted to the PCU a label should be placed on the PCU observation chart.

Measurement

APMS review of each individual patient daily.

Incident management process.

References

Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine (2015), Acute Pain Management Scientific Evidence, (Fourth Edition).

McIntyre, P.E., Ready, B.L. (2015), Acute Pain Management, A Practical Guide, (3rd edition), WB Saunders.

Policy Owner	Acute Pain Management Service
Policy Authoriser	Chief Medical Officer & Executive Director of Nursing
Date of Authorisation	