PAIN PROTOCOL – Recovery Room only

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM
Patients, in the Recovery Room, with moderate to severe pain to receive efficient and effective postoperative pain management to reduce their pain to a comfortable level. This is achieved through the administration of an intravenous opioid given in incremental doses titrated to the patient’s pain score and level of sedation.

2. PATIENT INDICATION
Postoperative – Recovery Room ONLY

For Opiate Pain Protocol
Pain: moderate to severe level
Sedation score: 0 - 1

ANAESTHETIC AND Recovery staff Consider Ketamine in addition to Pain Protocol when
- Has received 15mls Pain Protocol and pain remains severe
- Has opioid tolerance due to pre-operative opioid requirement
- Sedation score: 0 - 1

3. STAFF
Registered Nurse (RN) – accredited to administer Intravenous Pain Protocol
Medical Officer – Anaesthetist

4. EQUIPMENT
Opioid as per order on the National Inpatient Medication Chart, Sodium Chloride 0.9%, 10ml syringe, blunt 18g needle, appropriate drug label, alcohol swabs, kidney dish. Blue syringe label to identify IV route and drug.

5. CLINICAL PRACTICE
Prescription
- Prescriber must adhere to NSW Health Policy Directive PD2007_077 – Schedule 8 drugs
- The order is to be written on the back of the chart in the AS REQUIRED “PRN” MEDICATIONS section.
- The order must include Name of Drug, Route, Dose: “as per Recovery Room Pain Protocol” and the maximum dose to be administered.
- Standard RHW opiate concentrations
  - Morphine 10mg in 10mls
  - Fentanyl 100mcg in 10ml
  - Hydromorphone 1mg in 10ml
  - Oxycodone 10mg in 10mls
- Ketamine bolus see appendix 2
  - Ketamine 100mg in 10mls only administer in 10mg increments maximum 50mg

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Patient Assessment
The RN must assess the patient prior to commencing Pain Protocol for the following criteria:

- **Pain** – the location, cause and severity of pain (appropriate to the surgery) using a numerical pain scale 0 – 10 or descriptors the patient is able to understand; mild, moderate or severe. Pain assessment may require the use of a multi language visual analogue pain scale.
- **Sedation** – the patient must be fully awake or sedated but easily rousable
- **Respirations** – must be at a rate higher than 8 per minute
- **Blood Pressure** – must be within 20% the patient's normal limits using the preoperative blood pressure reading and patient history as a guideline

Procedure
- Check the IV cannula site for patency, swelling, inflammation
- 2 RNs to check the medication order and follow the RHW medication policy for handling S8 drugs
- Draw up the prescribed opioid (Morphine 10mg, Fentanyl 100mcg, Hydromorphone 1mg, Pethidine 100mg) into a 10ml syringe and make up to 10mls with Sodium Chloride 0.9%
- Label syringe with patient’s name, drug and concentration, date and time
- Refer to Opioid Pain Protocol Flow Chart (Appendix 1) to determine dose to administer (Patient under 70 yrs: 1 – 2ml every 3 minutes; 70yrs and over 0.5 - 1ml every 5 minutes)
- 2 RNs to check the patient as per RHW medication policy
- Ensure the patient is being administered oxygen via Hudson mask at 6 L/min
- Inject the first dose of opioid as a slow push and flush the line with the intravenous fluid in progress or 3-5ml of Sodium Chloride 0.9% drawn up in a separate syringe and labelled
- Record each dose on the medication chart as per RHW medication policy
- Repeat the dose after a minimum of 3 minutes if under 70 years or 5 minutes if 70 years or older
- Continue with incremental doses until the patient's pain score is 3/10 or less
- If the patient is not comfortable after giving 10ml of opioid (or maximum dose prescribed), obtain an anaesthetic review of the patient
- Patients with opioid resistant pain may require intravenous bolus Ketamine and continued Opioid Pain Protocol – refer to flow chart (Appendix 2)
- Discontinue the pain protocol if sedation score is 2 or greater and obtain an anaesthetic review of the patient
- Discontinue the pain protocol if the respiration rate is 8 or less per minute and obtain an anaesthetic review of the patient

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Observations
Once the pain protocol had been initiated the patient is to be monitored by the RN administering the opioid. At no time is the patient, or drug, to be left unattended.

- Record observations 10min: BP, Pulse, Respirations, Oxygen saturation, Sedation and Pain Scores
- Sedation level to be monitored continuously
- Pain Score to be assessed prior to each dose of the opioid
- All patients to be observed for a further 20 minutes (if up to 10ml opioid given) or 30 minutes (if greater than 10 ml opioid given) following the last dose of opioid before being assessed for readiness for discharge to the ward/unit
- Respiratory rate must be 10/minute or above , and sedation score of 0-1 at discharge

6. HAZARDS/SUB-OPTIMAL OUTCOMES
Over sedation. Sedation score of 2 – 3
Respiratory depression. Respiratory rate less than 8 per minute.
History of allergic reaction or an allergic reaction to the opioid in the recovery room.
Patients who are unstable: hypotensive, hypovolaemic, bradycardic, poor respiratory effort.
Assessment of the patient by the Anaesthetist is mandatory in this situation prior to commencement of pain protocol.
Concurrent epidural infusion: It is not routine for patients receiving an epidural infusion to also be administered intravenous pain protocol. Only in exceptional circumstances, following an anaesthetic review, will the anaesthetist order additional opioid via intravenous pain protocol.

7. DOCUMENTATION
NSW Health Medication Chart
eMR Surginet – PACU IVIEW: Vital Signs and Pain Assessment & Management

8. EDUCATIONAL NOTES
- Pain Assessment: verbal pain score 0 – 10 (0 = no pain; 10 = worst possible pain)
  verbal pain descriptors (eg. mild, moderate / strong, severe)
  visual analogue pain scale (facial expressions incorporating a numerical scale)
- Pain Scores: 0 = no pain
  < 4 = mild pain
  4 – 6 = moderate or strong pain
  > 6 = severe pain
- Sedation Scoring: 0 = wide awake
  1 = sedated but rousable
  2 = sedated and difficult to rouse
  3 = unrousable (patients who do not respond to voice or touch)
PAIN PROTOCOL – Recovery Room only  cont’d

- RN accreditation to administer pain protocol consists of successful completion of a worksheet and a competency assessment.
- Morphine or Fentanyl are the preferred over Pethidine due to norpethidine toxicity and abuse potential. Hydromorphone and oxycodone occasionally prescribed, anaesthetic staff to liaise with Pharmacy.
- Reduced dosing is generally required in patients with renal or liver disease and patients over 70 years of age owing to altered metabolism and excretion of opioids.

9. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

Accreditation of staff to give drugs in specific units
Medication: Administration – General principles for administration of medication
Naloxone – Guidelines for use of Naloxone HCL for the treatment of respiratory depression and over-sedation following opiate use
Sedation – Respiratory depression

10. REFERENCES


Prince of Wales Clinical Business Rule (June 2010). Immediate postoperative pain management in the Postanaesthetic Care Unit (PACU): intravenous opioid pain protocol.

St George Hospital and Community Health Service, PACU Policy & Procedure Manual (September 2010). PACU Intravenous Opioid Pain Protocol for Adults.

REVISION & APPROVAL HISTORY
Endorsed Therapeutic & Drug Utilisation Committee 10/12/13

FOR REVIEW : DECEMBER 2018
Appendix 1: INTRAVENOUS PAIN MANAGEMENT FLOW CHART

Patient has pain: more than moderate
Review intraoperative medications
Administer paracetamol/NSAID/Tramadol if prescribed and not already given

Ensure Pain Protocol is ordered on the medication chart
Prepare syringe with ordered opiate diluted to 10ml with sodium chloride 0.9% (label appropriately)
Patient assessment observations meet criteria

Patient < 70yrs old
Moderate Pain = give 1 ml
Severe Pain = give 2 ml

Wait 3 minutes
Assess pain and sedation scores
Repeat until pain score \( \leq 3 \)

Patient ≥ 70yrs old
Moderate Pain = give 0.5 ml
Severe Pain = give 1 ml

Wait 5 minutes
Assess pain and sedation scores
Repeat until pain score \( \leq 3 \)

Pain Score \( \leq 3 \) (up to 10mls administered)
YES
Commence maintenance analgesia plan

NO
Anaesthetic review required
If further Pain Protocol (10 ml) is ordered, repeat above steps

If patient has opioid resistant pain intravenous Ketaminebolus plus Opioid Pain Protocol may be ordered – see flow chart (Appendix 2)
Pain Score unchanged/severe after 15mls Intravenous Pain Protocol boluses given
Obtain anaesthetic review +/- order to use Ketamine plus Opioid Protocol from anaesthetist: Ketamine + opiate

Prepare Ketamine bolus syringe and label appropriately Ketamine
Ketamine 100mg in 10mls
*In addition to* Current pain protocol.

Patient awake, responsive and vital signs stable
➢ Warn patient of light headedness or disorientation lasting a few minutes

Give 1 ml bolus (Ketamine 10mg)

Wait 5 minutes or 10 minutes if severe disorientation
Assess pain and sedation scores
Alternate opiate 1ml with Ketamine 1ml until pain score < 5
Maximum 3mls ketamine → Anaesthetic review required
Maximum 3 mls → Anaesthetic review required

Pain Score < 5
YES
NO

Commence maintenance analgesia plan
Anaesthetic review required
Repeat above steps as ordered consider Ketamine infusion