

**The Newcastle upon Tyne Hospitals NHS Trust
Acute Pain Service
Anaesthetic Dept, Leazes Wing, RVI**

PROTOCOL FOR PATIENT CONTROLLED OPIATE ANALGESIA AT RVI/NGH

OPERATIONAL POLICY: Use and management of PCA for acute and postoperative pain relief where repeated doses of parenteral opiate are likely to be required.

It is suitable for use in any clinical area where nursing staff have had the necessary education and are confident in the management of PCA.

EFFECTIVE DATE: April 2005

Pre-operative preparation

- 1) Ensure that patient is suitable for PCA, for instance, young children, some elderly patients, patients with head injury and those with cognitive impairment, will be unlikely to understand and effectively use PCA.
- 2) To ensure safe and effective use, it is good practice to explain PCA thoroughly with the patient pre-operatively.
- 3) Patients should be given a PCA information leaflet pre-operatively. These are available on the wards or from the Acute Pain Service.

Setting Up PCA

The Trust PCA machine is the Graseby 3300 pump. We use pre-filled syringes; the standard mix is morphine sulphate 50mg in 50ml. If a different opioid or concentration is to be used, please contact the Acute Pain Sisters.

- PCA should be prescribed on either the standard white PCA prescription form for 1mg per ml morphine or a pink non-standard form for any other concentration or drug (e.g. fentanyl).
- PCA should normally be administered via the intravenous route. It is essential that a dedicated PCA infusion set which incorporates an anti-siphon and anti-reflux valve is used.
- PCA pumps should only be programmed by personnel competent in their use, e.g. Anaesthetists, Pain Sisters, Recovery/Anaesthetic staff.

PCA and Safety

Background infusions are not routinely used but may be necessary in patients with high opiate requirements.

The following group of patients are potentially at risk from significant respiratory depression when using opioid PCA.

- Significantly overweight patients or those at risk of upper airway obstruction.
- Patients who require large amounts of morphine to control their pain.
- Patients who do not understand the technique, e.g. non-English speakers.

- Patients whose relatives press the PCA demand button (relatives MUST NOT do this)

Care of high-risk patients

- Oxygen therapy must be maintained for the duration of PCA.
- Use pulse oximetry for as long as PCA is in situ.
- A four hourly limit should be set and should not be disabled without serious consideration of the risks.

No other opioids should be administered to patients receiving PCA unless explicitly recommended by the Acute Pain Service.

An orange 'warning sticker' should be attached to the front of the drug kardex and in the PRN section to alert staff that a PCA is in progress. The prescriber should record the PCA in the 'Any other charts in use' section of the Drug Kardex.

Acute Pain Service RVI/NGH
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