

## Morphine – Intravenous Bolus – Full Clinical Guideline

Ref No: CG-PM/2023/014

### Purpose

This method of pain relief is applicable to patients who are experiencing severe pain and are in areas where they can be closely monitored i.e. Recovery, ED, ICU, SDU, Endoscopy, X Ray

### Aim and Scope

To enable specifically trained registered practitioners to administer IV boluses of Morphine, as per the attached algorithm to alleviate moderate - severe pain.

### Definitions Used

**Registered Practitioner:** A nurse whose name appears on the Nursing & Midwifery Council register and holds a current Personal Identification Number.

An Allied Healthcare Professional, registered with the HPC and has completed a drugs assessment.

### Implementation

- **Only staff, who have been instructed in the use of the ‘Intravenous Morphine Bolus Guidelines’, and have successfully completed the eLearning Module, can administer Morphine using this technique.**
- Pain assessment can be completed either using the 0-10 pain scale or 0-3 pain scale. The key point is that these should be used to identify when a patient is in moderate to severe pain needing rescue with IV morphine in one of the settings described above.
- If using the 0-10 scale then a score of 6 or more would indicate the need for administration of IV morphine. If using a 0-3 scale then a score of 2 or 3 should apply.
- The Morphine should be prescribed via EPMA i.e. ‘Morphine Sulphate Injection’ ‘Required bolus dose’ (see flow chart), ‘Intravenous’ ‘As per protocol’ and in additional information write ‘Administer as per opioid bolus guidelines’.
- A patient receiving IV Morphine requires constant supervision by the staff member administering the drug. If it is not possible to provide this level of supervision, an alternative method of analgesia must be considered. (e.g. S/C)
- Age references in the guidelines highlight the possible pharmacokinetic effects on the actions of opioids in the elderly – see Flowchart

- Doses recommended are for adults 50kg or over. Senior advice should be taken with frail and/or patients with renal or liver impairment.

### **Guidelines**

1. Follow the flow chart: - Intravenous Morphine Bolus:  
Guidelines for Adults
2. To ensure adequate central absorption flush each bolus with 5mls of Normal Saline.
3. ' The IV Morphine Bolus ' protocol should cease when: -
  - a) Pain score is at an acceptable level for the patient.
  - b) If the patient becomes symptomatic with: -
    - ◆ A resting respiratory rate of less than 8
    - ◆ An AVPU score of **P or U**
    - ◆ A systolic blood pressure of 90 or less
    - ◆ Persistent nausea and vomiting
4. Treatment of complications

If the respiratory rate falls below **8** or the **AVPU** score = **P or U**, **NALOXONE** may be required and should be given, as prescribed, in increments of 100microgrammes, by suitably trained staff.

**NB** The  $\frac{1}{2}$  life of Naloxone is shorter than Morphine therefore the patient must be monitored in case of further fall in sedation and/or respiratory rates.

### **References**

Australia and New Zealand College of Anaesthetists and Faculty of Pain Medicine  
**Acute Pain Management Scientific Evidence.** Fourth Edition 2015

Department of Health **National Service Framework for Older People**  
Standards 1 and 4

Gloth M. (2001). **Pain management in Older Adults: Prevention & Treatment.**  
The Journal of American Geriatrics Society, **Vol.** 49 (2) pp.188-99.

Iverson L. (1996). **Neurobiology. How does Morphine Work?** Nature. **Vol.** 388 (6603) pp.759-60.

Kai-Cheung Chuk P. (1999). **Vital signs and nurses' choices of titrated doses intravenous morphine in relieving pain following cardiac surgery.** Journal of Advanced Nursing. Vol. 30 (4)pp.858-65.

McQuay H. et al (1997). Treating Acute Pain in Hospital. **British Medical Journal**, Vol.314(7093)pp.1531-35.

NMC (2015) **The Code of Professional Conduct**  
NMC: London

Ravenscroft P. & Schneider J. (2000). Bedside perspectives and the use of opioids: Transferring results of clinical research into practice. **Clinical & Experimental Pharmacology and Physiology**, Vol. 27 (7) pp.529-32.

**UHDB Expansion & Implementation of developing Scope of Professional Practice - Trust Policy and Procedure**

**Documentation Controls:**

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