# SIR CHARLES GAIRDNER HOSPITAL
# Emergency Department

AREA SPECIFIC PRACTICE GUIDELINE
**ANALGESIA GUIDELINE**

## Legislative Requirements
Poisons Act 1964
Poisons Regulations 1965

## Other Relevant Documents;
Hospital Policy 141
Nursing Practice Guideline 51
ED Area Specific Guideline – IV Opiate Analgesia and Escort Policy (Nursing)

## Medical Requirements
A valid prescription from a doctor or nurse practitioner is required for administration of Schedule 4 (S4) and Schedule 8 (S8) drugs

See "Recommendations for Analgesia according to Pain Score" below

## Safety Information
Refer to individual medications

## Nursing Management
**Patient Assessment:**
Assess the following criteria prior to the administration of any medication
- Site (may be > than 1)
- Time of Onset
- Pain Score
- Analgesic Medication in the last 24 hours
- Allergies or Contra-indications to Analgesia e.g. Pregnancy / breastfeeding
- Co-morbidities including liver, kidney, gastrointestinal or haematological disease and assessment of drug interactions with these diseases.

Vital signs
- Before oral analgesia; any relevant presenting problem and minimum of pulse, respirations and pain score must be documented.
- Full set of vital signs required if gross abnormalities seen in the above.
- Before IV analgesia: full set of vital signs and pain score needs to be done and recorded.

## Non-Pharmacological Methods of Pain Control
*Splinting*
Apply wood or cardboard splints if possible, using combine dressings to comfortably support deformities and securing with crepe bandage. X-rays may be taken through splint.

Apply high arm sling for wrist and hand injuries or broad arm sling for other arm injuries. Elevate lower limb for leg injuries.

*Cold Pack*
- Placement is usually over painful site.
- Prevent direct contact with cold source on the skin
- Leave for approximately 20 minutes

**Nurse Initiated Analgesia**
Nursing staff may administer paracetamol and NSAIDs if there is no contraindication. Otherwise, seek a written prescription for S4 or S8 pharmaceuticals.

## Pain Score and Rationale of Analgesic Choice

Pain can't be objectively measured. The literature suggests health staff frequently underestimate a patient's pain. We should accept the patient's scoring of their pain and use that as a reference for assessment of effectiveness of pain relief. However, we can exercise some judgement in prescribing from the apparent level of the patient's distress.

**0/10**

Even if the patient doesn't have pain, documenting a pain score of "0" indicates patient has been asked about pain.

**Mild**
**1 – 3/10**

Paracetamol is an effective analgesic and should be given to all patients with pain, even if they are being given more potent analgesics. However, some patients may express doubt regarding its effect. Patients should still be encouraged to take paracetamol. Pain relief effect is better when taken regularly i.e. QID

NSAIDs are also effective in relieving pain and their analgesic effect is not directly related to their anti-inflammatory effect. They have added effect to paracetamol and may be an alternative if paracetamol is contraindicated. It is the second choice because it is probably more likely to give side effects.

**Moderate**
**4 – 6/10**

Adding codeine to paracetamol increases its analgesic effect. 60 mg of codeine is a relatively low dose as an opiate. Being combined with paracetamol allows it to be classed as an S4 drug but alone it is an S8. Codeine has its effect by being metabolised to morphine in the body. Some people are "fast metabolisers" and are prone to the adverse effects such as nausea and vomiting, and drowsiness. Some are slow metabolisers and feel no significant benefit with codeine.

Tramadol is a weak opiate and may be considered as an alternative to codeine. It is probably most useful in the treatment of neuropathic pain

Paracetamol and NSAIDs are still useful if an opiate analgesia has been given.

**Severe**
**7 – 10/10**

Oral hydromorphone or oxycodone IR (for the elderly) may be used for strong pain if IV administration is not desired or not practical. Hydromorphone is recommended instead of oxycodone IR because it is considered less addictive. However, oxycodone IR has some CNS stimulant effects and may be better to use in the elderly.

Sublingual buprenorphine may also be used when a rapid effect is needed but seems empirically to have a higher incident of adverse effect, especially in the elderly.

Morphine is considered the benchmark for IV opiates. Hydromorphone is a useful alternative if there is a history of adverse reaction to morphine (usually related to histamine related rash and hypotension). Fentanyl has a rapid onset and is the least likely opiate to cause hypotension but has a short duration of effect.

Ketamine is useful if opiates are contraindicated or are ineffective. It is considered safe in patients with hypotension.

Paracetamol and ibuprofen may reduce the requirement for opiates. They should always be given if not contraindicated

## Recommendations for Analgesia According to Pain Score

<table>
<tr><td>Mild<br>Pain Score 1-3</td><td>2 x Paracetamol 500mg tabs (=1 gm) PO<br>plus<br>2x Ibuprofen 200mg (=400mg) PO, if further analgesia required</td></tr>
<tr><td>Moderate<br>Pain Score 3-6</td><td>2 x Paracetamol 500mg/Codeine 30mg (“Panadeine Forte”) PO<br>or<br>Tramadol IR 100mg PO<br>plus<br>2x Ibuprofen 200mg (=400mg) PO, if further analgesia required</td></tr>
<tr><td rowspan="3">Severe<br>Pain Score 7-10</td><td>Transfer Lobby / Waiting Room<br>Panadeine Forte or Tramadol IR as above if patient not objectively distressed<br>or one of the following<br>• 1 – 2 Hydromorphone 2mg PO<br>• 1 – 2 Oxycodone IR 5 mg (“Endone”) PO if elderly<br>• 200 – 400 mcg Buprenorphine SL<br>and<br>2 x Paracetamol 500mg tabs (=1 gm) PO<br>plus<br>2x Ibuprofen 200mg (=400mg) PO if further analgesia required</td></tr>
<tr><td>Main Department<br>Panadeine Forte or Tramadol IR as above if patient not objectively distressed<br>or one of the following<br>• 1 – 2 Hydromorphone 2mg PO<br>• 1 – 2 Oxycodone IR 5 mg (“Endone”) PO if elderly<br>• 200 – 400 mcg Buprenorphine SL<br>• Morphine IV titrate 2.5 mgs boluses up to 10mg<br>• Hydromorphone IV titrate 0.5 mg bolus up to 2 mg if adverse reaction to Morphine<br>• Fentanyl IV titrate 25 mcg boluses up to 100 mcg if rapid onset of analgesia felt necessary<br>• Ketamine IV titrate 10 – 20 mg boluses up to 0.5 mg/kg if opiate is contraindicated or ineffective<br>and<br>2 x Paracetamol 500mg tabs (=1 gm) PO<br>plus<br>2x Ibuprofen 200mg (=400mg) PO if further analgesia required</td></tr>
<tr><td>Observation Ward (Obs Patient)<br>To be prescribed on a hospital medication chart<br>1. paracetamol 1 gm 6 hourly<br>or Panadeine Forte 2 tablets 6 hourly<br>or tramadol IR 100 mg 8 hourly<br>2. A regular NSAID if needed e.g. ibuprofen 400 mg 8 hourly with food<br>3. hydromorphone 2 – 4 mg 3 hourly PRN<br>or oxycodone IR 5 – 10 mg 3 hourly PRN<br>or Buprenorphine 200 mcg 3 hourly PRN<br>4. Adjuvants for pain management (see below)</td></tr>
</table>

**NOTE: Patients who can’t swallow tablets;** Soluble paracetamol, aspirin, “Aspalgin” (aspirin 300 mg and codeine 8 mg per tablet) or “Painstop” liquid (40 ml = 1gm paracetamol and 40 mg codeine) for those who can’t swallow tablets

## Antiemetic

An antiemetic does not have to be routinely given to patients receiving IV opiates unless the patient is nauseated or has a history of opiate induce nausea.

## Adjunct Pharmaceuticals for Acute Pain Management

- Dexamethasone for odynophagia (sore throat / pharyngitis and tonsillitis)
- Long acting local anaesthetic agents as a local or regional block (especially dental pain)
- Benzodiazepines may have benefit for acute low back pain in some patients (but not first line)
- Clonidine may improve the effect of opiates

## Adjuvants for Chronic Pain

- Amitriptyline, initially 10 mg daily, usually in the evening.
- Carbamazepine, initially 100 mg BD
- Gabapentin, initially 300 mg a day
- Pregabalin, initially 50 mg TDS

## Laxatives

Always prescribe laxatives if prescribing opiates

- Bulk-forming laxatives (also increase water intake) psyllium, methylcellulose, sterculia or unprocessed bran.
- Osmotic laxatives lactulose, macrogols, phosphate enemas or sodium citrate enemas.
- Stimulant laxatives bisacodyl, glycerol, senna or sodium picosulfate.
- Faecal softeners sodium docusate or liquid paraffin