Hydromorphone in Palliative Care

Description
Potent, opioid analgesic; used 3rd or 4th line so ***seek specialist advice***.

Preparations

Oral	Immediate release hydromorphone **Palladone** ® capsules	1.3mg, 2.6mg
	Modified release (long acting) hydromorphone **Palladone SR** ® capsules	2mg, 4mg, 8mg, 16mg, 24mg
	Immediate release hydromorphone liquid	e.g. 10mg/1ml (other strengths can be made on request) Unlicensed preparation but can be made to order from Non-sterile Production Unit, Western Infirmary (Tel: 0141 211 2754)
Injection	10mg/1ml 20mg/1ml 50mg/1ml	Used as a subcutaneous infusion or as a subcutaneous bolus injection. Unlicensed preparation but is available from Cardinal Health Martindale Products (Tel: 01277 266 600 freephone order no. 0800 137627 fax 0800 393360) www.martindalepharma.co.uk

Indications
- Third or fourth line oral and injectable analgesic for moderate to severe opioid responsive pain in patients unable to tolerate oral morphine/oxycodone, subcutaneous diamorphine/morphine or oxycodone due to persistent side effects (e.g. sedation, confusion, hallucinations, itch).

Side effects
- Opioid side effects similar to morphine/oxycodone-monitor for opioid toxicity.
- Prescribe a laxative to be taken regularly and antiemetic as needed
- Hydromorphone may cause drowsiness, impairing mental and/or physical ability. If affected do not drive or operate machinery. Avoid alcoholic drink.

Drug interactions
- Similar to other strong opioids such as morphine/oxycodone. Hydromorphone may be expected to have additive effects when used in conjunction with alcohol, other opioids, or drugs that cause CNS depression (sedatives, hypnotics, general anaesthetics, phenothiazines, tranquilisers.etc). Respiratory depression, hypotension and profound sedation or coma may occur.

Cautions
- Immediate release and modified release capsules have similar names. **Prescribe and dispense by brand name.**
- Frail or elderly patients need smaller doses less frequently and slower titration.
- **Liver impairment**: reduced clearance. Patients with moderate hepatic impairment should be started at a lower dose and closely monitored during dose titration.
- **Renal impairment**: reduced excretion.
  Titrate slowly and monitor carefully in mild to moderate renal impairment.
  Avoid in chronic kidney disease stages 4-5 (eGFR <30ml/min).

Dose & Administration

- Immediate release oral hydromorphone:
  Prescribe 4 hourly regularly and use the same dose as required for breakthrough pain.
- Modified release (long acting) oral hydromorphone (Palladone SR):
  - Prescribe 12 hourly, with a 1/6th of the 24 hour dose as immediate release oral hydromorphone for breakthrough pain.
  - Palladone SR capsules can be opened (if difficulty when swallowing the SR capsules) and the contents sprinkled on cold soft food, but the granules should NOT be broken, chewed, dissolved or crushed. Seek pharmacy advice if the patient has a feeding tube.
- Hydromorphone injection:
  - Continuous subcutaneous infusion in a syringe pump over 24 hours.
  - In addition, prescribe 1/6th of the 24 hour infusion dose subcutaneously, 1-2 hourly as required for breakthrough pain (max. 6 doses in 24 hours)
  - Diluent: water for injection.
  - Stability and compatibility: reported to be physically stable with the following medicines over 24 hours: haloperidol, hyoscine hydrobromide, levomepromazine, metoclopramide and midazolam. ((Reference Dickman). Sodium Chloride 0.9% can also be used as a diluent.Seek specialist palliative care/pharmacy advice.

Dose Conversions

- Hydromorphone is approximately 7.5 times more potent than morphine

Oral morphine 10mg	~ oral hydromorphone 1.3mg
Oral hydromorphone 10mg	~ subcutaneous hydromorphone 5mg
Subcutaneous morphine 30mg	~ subcutaneous hydromorphone 4mg
Subcutaneous diamorphine 20mg	~ subcutaneous hydromorphone 4mg

- As with all opioid conversions, these are approximate doses.
- Dose conversions should be conservative and doses rounded down.
- Monitor the patient carefully so that the dose can be adjusted if necessary.
- If the patient has opioid toxicity, reduce the dose by 1/3rd when changing opioid.

Resources

Professional

Palliative Care Drug Information online: http://www.palliativedrugs.com

Patient

Hydromorphone Patient Information Leaflet

Discharge Planning/Community use:

- The GP, community pharmacist and district nurse should be informed.
- The unscheduled care service should be informed that the patient is receiving this third line opioid e.g. via the ePCS.
- Hydromorphone can be prescribed by the patient's GP for the indications listed in liaison with local palliative care specialists.
- Patients should receive an initial supply on discharge to allow adequate time for the community pharmacist to order the preparation(s) required.

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