Medication Safety Alert

New higher concentrated formulation of HYDROMorphine

HCL 50 mg/1 mL for injection (DILAUDID-HP®),
(HYDROMorphine hydrochloride solution for injection)

Background

- HYDROMorphine is a potent opioid analgesic frequently used to treat moderate to severe, acute or chronic pain. It is 5 to 7 times more potent than morphine. Due to its high potency, clinical incidents involving this medicine may result in serious adverse patient outcomes.
- A change in manufacturer means the 50mg/5mL ampoules of HYDROMorphine will no longer be available from 30 April 2017. Mundipharma will begin to distribute the new 50mg/1mL concentrated injection in packs of 5 ampoules from 1st August 2017.
- The new higher concentrated HYDROMorphine formula potentiates the already established risks known to be associated with HYDROMorphine.
- The high-dose formulation of HYDROMorphine will not be listed on the WA State Medicines Formulary (SMF).

WAMSG recommends hospitals consider stocking only lower concentrations of HYDROMorphine ampoules (2mg/mL, 10mg/mL), as the primary risk mitigation strategy.

If high concentration HYDROMorphine is required:

Safety

- liaise with your Medication Safety Committee (MSC) or Drug and Therapeutic Committee (DTC) to approve a local HYDROMorphine protocol for your hospital/health service
- distribute this Safety Alert to all relevant clinical staff
- limit stocks and store separately from morphine and other HYDROMorphine concentrations
- use a dedicated S8 register which clearly marks the high-concentration HYDROMorphine or ensure differing concentrations of HYDROMorphine are not stocked concurrently
- limit prescription and storage to specialist pain management or palliative care services
- establish a process to ensure prompt removal of high concentration HYDROMorphone from clinical areas where use is infrequent
- ensure a pharmacist prioritises a pharmaceutical review for patients on high concentration HYDROMorphone (prior to administration of the first inpatient dose, while not unnecessarily delaying the provision of analgesia), and prioritises reconciliation for these patients
- provide visual prompting labelling e.g. High Risk Medication stickers

**Prescribing**
- restrict initial prescribing to senior staff or staff very familiar with high concentration HYDROMorphone (e.g. senior medical officers/consultants/palliative care prescribers/ GP Visiting Medical Officer [VMO], Chief Medical Officer [CMO] or specialized Health Service Provider (HSP) credentialed nurse practitioners working in palliative care)
- when altering or re-charting an order, the dose is checked and medication order countersigned by a registrar, more senior medical officer /prescriber very familiar with high concentration HYDROMorphone
- ensure staff prescribing, dispensing or administering high concentration HYDROMorphone are provided with education on strategies for safe handling of this medication and restrict the administration to registered nurses who have been provided education on the differing HYDROMorphone concentrations
- ensure naloxone injection is prescribed on the medicine chart and available for reversal in clinical units where HYDROMorphone is used
- ensure a prescriber reviews the patient and sights the medication chart to confirm the dose, in the event of a dose of HYDROMorphone being queried and re-enforce any escalation pathway if concerns by staff are not adequately addressed.

Signed by:
Neil Keen
Chair, WAMSG

**Further Reading and Resources**