PHARMACY PROFILE: MORPHINE

Key Messages

- Morphine is the opioid of choice for moderate to severe pain.
- Low dose morphine reduces the sensation of dyspnoea.
- Start morphine at a low dose in the elderly.
- All patients prescribed morphine should also be taking a regular laxative.

Of all the opioids marketed in Australia, morphine is preferred because of experience with prescribing and the availability of a range of formulations. All formulations are available on the Pharmaceutical Benefits Scheme (PBS) and therefore accessible and affordable for the public. Morphine works by activating opioid receptors throughout the body (both centrally and peripherally), reducing the transmission of pain nerve impulses to the brain. While it is registered in Australia for the treatment of moderate to severe pain, there is also strong evidence that low doses relieve the sensation of dyspnoea, without contributing to respiratory depression. When prescribed in appropriate doses for symptom management, it does not lead to addiction.

Morphine metabolites are active and accumulate in patients with renal dysfunction. In practice this means that generally lower doses are recommended in those with poor renal function, including the elderly. The dose is then titrated until the pain is relieved. Alternate agents should only be considered if the renal function is extremely poor.

To provide continuous pain relief, morphine should be given at regular fixed intervals. A separate order is needed to respond to breakthrough or incident pain that may occur throughout the day. Therefore, a patient with chronic symptoms will be prescribed a combination of:

- Slow release morphine (e.g. Kapanol®, MS Contin®) for background pain relief; and
- Immediate release morphine (e.g. Ordine Oral Solution®, Sevredol ®) for breakthrough pain.

In patients unable to swallow, 24 hour subcutaneous infusions are used, with breakthrough doses provided by subcutaneous boluses.

Nursing Assessment

Prior to administering a dose, the following nursing assessments should be made:

- Assess the patient’s pain (e.g. location and intensity) prior to administration of a dose. Frequent administration of breakthrough morphine may identify inadequate background analgesia.
- Contact the prescriber if the degree of sedation changes significantly. Patients who are easy to rouse but unable to stay awake may be at risk of respiratory depression.
Administration Points

MS Contin® granules for suspension or Kapanol® capsule contents can be dispersed in water and administered immediately to people with PEG feeding tubes, or with swallowing difficulties. Crushing slow release products changes the rate at which they are absorbed and is inappropriate.

Monitoring

Adverse effects to morphine may affect compliance and ability to manage the pain. The response to adverse effects will vary and depends upon the symptom:

- **Nausea and vomiting** can commonly occur and often lessens with continued use. An antiemetic may be given prophylactically and should be reviewed within a few days.

- **Constipation** is also common, yet tolerance is unlikely. While fluid intake, diet and mobility should be assessed, it is essential to add a regular laxative when morphine is used chronically.

- **Respiratory depression** is dose related and is judged best by the degree of sedation: reduction in respiratory rate is a late and unreliable sign.

- **Itching and flushing** rarely occur after administering morphine. Alternative opioids should be considered in these circumstances.

Reassess pain after administering breakthrough doses to determine effectiveness. This is recommended 60 minutes after an oral dose and 30 minutes after a subcutaneous dose. If the symptom is unrelieved, consider contacting the prescriber for further advice.

Resources


- [Palliative Care Australia](http://www.palliativecare.org.au) has a consumer friendly resource responding to common questions about pain and its management.

- Contact your local pharmacist or call your local hospital and ask to speak with their drug information service.

This update is intended to provide practical up to date information relating to medicines management in the setting of palliative care and is based on critical review of available evidence. Individual patient circumstances must be considered when applying this information.

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