OPIOIDS

Top tips for MURs

- Check that the patient understands why the opioid has been prescribed and check if still indicated
- Counsel patient on the need to take medication in a time contingent manner i.e. by the clock and not according to pain to maintain adequate pain control
- Check that patient has had an opioid treatment review in the last 6 months; annual renal and liver function tests
- Advise patient that when moving from one step of treatment to the next, at least 5 days should be trialled to allow transient side effects to diminish and the effectiveness of the step to be assessed
- Counsel patient on signs / symptoms that need referral and common side effects (**see overleaf**)
- Advise patient that opioid medications should not be stopped suddenly and to seek advice if they want to reduce their medication
- Signpost patient to self-help leaflets and websites or expert patients programme
- transdermal patches should be reserved for those patients who cannot take medicines orally (check local formularies for more information)
- Advise patient using opioid patches on correct administration, disposal, the need to avoid external heat (e.g. hot bath, sauna) and to seek medical advice if they have a fever
- Counsel patient on long- term opioid therapy of potential side effects, including hyperalgesia, sexual dysfunction and lowered immunity and fertility
- Advise patient on non-pharmacological interventions to manage pain e.g. weight management, physiotherapy, exercise, TENS machines
- Counsel patient that they should avoid driving for at least two days at the start of opioid therapy or following any dose changes and that they should inform the DVLA that they are taking opioid medication
- Report any relevant adverse drug reactions to the Yellow Card Scheme

What are Opioid analgesics used for?

Opioids are traditionally classified as strong or weak and are prescribed to reduce pain intensity[1]. They are usually used to relieve both chronic and acute pain of moderate to severe intensity and can be effective in the management of somatic, visceral and neuropathic pain. Repeated administration may cause dependence and tolerance. Opioids should only be used and continued in chronic non-malignant pain to reduce pain symptoms sufficiently well enough to allow functional improvement. Should function not improve within 6 months of starting opioids, then serious consideration needs to be given to reducing and eventually stopping them.

Opioids for moderate pain	Opioids for moderate to severe pain
Codeine	Morphine
Dihydrocodeine	Fentanyl
Tramadol	Oxycodone
	Buprenorphine
	Hydromorphone

Only ONE opioid should be prescribed at a time and patients on multiple opioids should be referred back to the prescriber for rationalisation of their medication. The use of immediate acting 'strong' opioids is not advised in chronic non-malignant pain as these drugs or formulations have higher incidence of addiction due to their quick onset and potential for psychological 'highs' and do not flatten the peaks or troughs of a patient's pain across the day. Use of these medicines should be discouraged and the patient referred back to their prescriber for more suitable medication – ideally slow-release. Alternative non-opioid medications for example anticonvulsants / tricyclic medications may be preferable to the use of modified release opioid preparations.

How do opioid analgesics work?

Opioid analgesics mimic the body's naturally-occurring painkillers (endorphins) and bind with opioid receptors at multiple sites of the central nervous system, activating descending pathways in the spinal cord and preventing the release of neurotransmitters which reduce the intensity or inhibit the pain messages travelling up to the brain[2]. They act as opioid receptor agonists to three opioid receptors (mu, kappa & delta), with most opioids binding to one type of receptor preferentially, primarily the mu receptor. Differences in the opioids arise from their receptor specificity and their water and lipid solubility[2].

Tramadol has a second mechanism of action involving an enhancement of serotonergic and adrenergic pathways. This mechanism may be useful for patients with mixed aetiology of pain e.g. nociceptive and neuropathic symptoms. Tramadol should be used with caution in elderly patients and avoided in epilepsy. Buprenorphine is a partial opioid agonist, although this is not clinically significant at systemic levels achieved using transdermal burprenorphine preparations. Oral burpenorphine is not suitable for chronic non-malignant pain management.

Lifestyle issues:

- Counsel patient on reducing alcohol intake to within safe limits (up to 14 units a week, spread evenly over 3 more days, with several alcohol free days)
- Counsel patient on healthy eating, exercise & weight loss (if BMI > 25kg/m^2)
- Advise patients to complete 30 minutes of aerobic exercise three to five times a week, reduce caffeine intake to no more than 5 cups a day and recommend 5 portions of fruit and vegetables a day
- Advise patients who smoke the benefits of stopping smoking and how to access pharmacy smoking cessation services or Stop Smoking Wales

Compiled: M Davies, WCPPE, January 2013
Expert review: Emma Davies, Abertawe BroMorgannwg UHB, March 2013
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Red flags that need referral

- Any signs of opioid toxicity (pinpoint pupils, sedation, slow respiration, cyanosis e.g. lips, ears, nose (in severe cases), myoclonic jerks, changes in sleep pattern including snoring, vivid dreams, nightmares)
- Any signs of increased agitation, confusion or hallucinations
- Any headaches which have developed or worsened while taking opioids
- Any muscle pains
- Pregnancy as risk of teratogenicity & breastfeeding as risk of toxicity to infant – especially tramadol
- Any cardiovascular symptoms (bradycardia, tachycardia, palpitations, postural hypotension)
- Any loss of libido, erectile dysfunction in men, or amenorrhoea in women
- Fentanyl patches should be removed immediately in case of breathing difficulties, marked drowsiness, confusion, dizziness or impaired speech (removal of a transdermal patch does not result in immediate cessation of impairment – can take up to 24 hours for symptoms to resolve)

What are the common side effects to look out for?

Side effect	Recommendation
Nausea and / or vomiting	Advise patient that this is usually short term and tolerance develops in 5 to 10 days. May require an anti-emetic for the first week to allow sufficient trial of the medication. Refer to prescriber if not tolerated.
Constipation	Advise patient to take regular prophylaxis with a stimulant and softening laxative. Refer to prescriber if not tolerated.
Drowsiness	Advise patient to avoid driving and other at risk activities and to limit the use of other sedating medications.
Dry mouth and biliary spasm	Refer to prescriber if not tolerated.
Bradycardia, tachycardia, palpitations, oedema, hallucinations, vertigo, euphoria, dysphoria, mood changes, sleep disturbance, headaches, urinary problems, visual disturbances, sweating – **more commonly seen with use of strong opioids (morphine, fentanyl, diamorphine, oxycodone, pethidine, buprenorphine, hydromorphone)**	Advise patient that many of these side effects are short term. Refer to prescriber if not tolerated.
Pruritis - **more commonly seen with morphine drugs**	Refer to prescriber if not tolerated.
Muscle rigidity, hypotension, respiratory depression – **more commonly seen with high doses of opioids**	Refer to prescriber if not tolerated.
Abdominal pain, anorexia, myoclonus - **more commonly seen with fentanyl and morphine**	Refer to prescriber if not tolerated.
Diarrhoea - **more commonly seen with tramadol & fentanyl**	Refer to prescriber if not tolerated.
Hypertension, vasodilation, dyspnoea, myoclonus, anxiety, tremor – more commonly seen with fentanyl	Refer to prescriber if not tolerated.
Taste disturbance, hypothermia, syncope, amenorrhoea, rhabdomyolysis, nystagmus - **more commonly seen with morphine**	Refer to prescriber if not tolerated.
Retching, fatigue, paraesthesia – **more commonly seen with tramadol**	Refer to prescriber if not tolerated.

Potential drug interactions?

Opioids interact with many medications including: pethidine and other opioids with transdermal preparations (special hazard due to long duration of action); dopaminergics, memantine (↑ risk CNS toxicity); cimetidine (↑ plasma concentration); alcohol, antipsychotics, (↑ hypotensive and sedative effect); anxiolytics and hypnotics (↑ sedative effect); antivirals, antifungals, antidepressants, anticonvulsants (plasma concentrations altered see BNF); MAOIs and pethidine (serotonin syndrome) – **See BNF Appendix 1: Interactions for more details**

Where can you find more information?

- Opioid Analgesics – BNF sub-section 4.7.2
- Pain: treatment and management distance learning packs that can be found on WCPPE website (**http://www.wcppe.org.uk**)
- NICE guidance *Osteoathritis (CG59): CG140 Opioids in palliative care* can be found on NICE website (**http://www.nice.org.uk**)
- Clinical Knowledge Summaries (**http://www.cks.nice.org.uk**)
- National Prescribing Centre (**http://www.nps.nhs.uk**)
- Opioids for persistent pain: Good practice (**http://www.britishpainsociety.org/book_opioid_main.pdf**)

References

1. Opioids for persistent pain: good practice. The British Pain Society's January 2010
2. Pain: treatment and management. CPPE 2009.

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