THE USE OF OPIATES IN CHRONIC PAIN

Opiates ARE useful for ACUTE pain and CANCER pain and in PALLIATIVE care.

Beware of use of opiates in chronic pain conditions:
Context - looking at the USA:

- 1 in 500 patients starting opiates die of opiate-related causes within 2y of first prescription
- Rates of dependence in those on long-term opiates may be as high as 26%. Deaths from opioid prescribing now outstrip death from cocaine and heroine combined in the USA
- 4% are on long-term opiates
- 11% of the population have a chronic pain diagnosis

In studies comparing use of various combination painkillers (naproxen + placebo vs naproxen+oxycodone) found there was no difference in pain, function or healthcare usage at 7d or 3m suggesting that in acute back pain there is no advantage to prescribing anything in addition to naproxen.
REAL evidence of harm of opioid use:

- Adverse effects are common (NNH=4)
  - Constipation
  - Nausea
  - Sedation
  - Depression
  - Sexual dysfunction (men on opioids are more likely to use drugs for sexual dysfunction 19% vs. 7%)
  - Increased risk of falls and fractures
- Hyperalgesia (increase in sensitivity to pain)
- Substance use disorder (i.e. addiction)
  - Tolerance: the need for increased amounts to achieve the desired effect.
  - Withdrawal effects
  - Dependency has been demonstrated at 1m of treatment in patients taking oxycodone.
  - Over half of all patients taking opioids for 3m will still be taking them at 1y.
  - Studies vary at the level of dependency, due to different diagnostic criteria but range between 5 and 30%.
  - **Urine testing of patients taking opioid: in 1 in 5 cases (either no drug found(!), or higher levels than prescribed).**

CDC guideline for prescribing opiates in chronic pain

- Non-pharmacological and non-opiate options are preferred choices for chronic pain. Use these first as there is good body of evidence to support that these work (non-opiate analgesia, antidepressants, neuropathic painkillers and non-pharmacologic interventions e.g. CBT, exercise therapy.
- Reassess carefully if dose escalating above **50mg morphine equivalent**
- **Avoid escalating doses to 90mg morphine equivalent or more per day**
- Evaluate response within 4w of starting and then at least every 3m.
- Long-term use often occurs after a short-term prescription for acute pain, to avoid this:
  - Use immediate release preparations.
  - **Limit the prescribed quantity to the expected duration of acute pain – usually no more than 7d i.e. avoid putting on repeat**
- Review history for risk factors for misuse and excess harms, e.g. previous overdose, history of substance misuse, previous high doses of opiate, history of mental health problems.
- Review previous prescribing history for evidence of controlled substance use in the past.
- Avoid prescribing opiates and benzodiazepines together wherever possible.
- Consider urine drug testing before and annually during treatment

Opioid	Conversion factor	50mg morphine/day equiv (reassess if doses are escalating above these levels)	90mg morphine/day equiv (do not escalate above these doses)
Morphine (oral)	1	50mg/d	90mg/d
Codeine (oral)	0.15	330mg/d	600mg/d
Tramadol (oral)	0.1	500mg/d	900mg/d
Oxycodone (oral)	1.5	33mg/d	60mg/d
Fentanyl (transdermal)	2.4	20mcg/h	37.5mcg/h

When changing from one opiate to another, the new opiate should typically be dosed at a lower level than the calculated MME to avoid accidental overdose. **The American Pain Society recommend a 25% reduction.**

Groups at particular risk of harms from opiates

- Avoid opiate use wherever possible in:
  - Patients with sleep-disordered breathing, e.g. obstructive sleep apnoea.
  - Pregnant patients – for pregnant women on long-term opiates that cannot be reduced and stopped, facilities should be available at delivery to manage any opiate withdrawal in the baby, i.e. hospital delivery.
- Be aware of increased risk of toxicity/overdose in:
  - Patients with renal or hepatic failure – this needs close monitoring.
  - Patients aged 65y or more.
  - Patients on concomitant benzodiazepines.
  - History of past or current drug and alcohol misuse.
  - Those recently released from prison who may rapidly escalate their doses without realising their previous tolerance level has dropped.
  - Those with a history of mental health conditions, particularly if treatment is not optimised at the time of opiate treatment.:

e.g. for back pain consider monitoring progress according to activity level rather than pain level

NSAID: as an alternative – what is the evidence for effectiveness and harms?

Lancet 2016;387:2093

- The effect of different NSAIDs varied greatly and there was a dose-dependent effect on pain and function.
- Diclofenac 150mg was the most effective in terms of pain and function.
- Paracetamol and naproxen 750mg daily had almost no effect on pain or function.
- Naproxen 1000mg daily was effective but less so than diclofenac
- Etoricoxib and rofecoxib were a little more effective in terms of pain and function than naproxen, but less than diclofenac.

  HARMS
  HOWEVER THIS STUDY DID NOT LOOK AT THE SAFETY ASPECT OF NSAID PRESCRIBING e.g. kidney damage, GI bleeds etc. This was looked at BMJ 2013;346:f3195:
  - For every 1000 people taking diclofenac or a coxib for 1y 3 extra will have a major vascular event of which 1 will be fatal.

- Naproxen ≤750mg/d is safest.
- Low dose ibuprofen ≤1200mg/d is also safe, but ≥2400mg/d has increased CV risk.
- Do not co-prescribe NSAIDs with aspirin – it blocks the anticoagulant effect.
- Monitor BP if NSAID prescribing is long-term.
- Do not use diclofenac or coxibs in patients with established:
  - IHD
  - peripheral arterial disease
  - stroke
  - congestive cardiac failure.

When considering Osteoarthritis, NICE in 2008, recommend that all patients should be offered three core treatments:

- Written and verbal information about OA to counter misconceptions. This should be ongoing.
- Advice on exercise and physical activity (local muscle strengthening, stretching and general aerobic fitness).
- Weight loss interventions (if appropriate).
- Treatment options:
  - Topical NSAIDs first line with oral NSAID second line. If using oral use lowest effective dose for shortest possible time with PPI cover. Try to avoid oral if patient taking aspirin
  - Don't forget walking sticks for OA of the knee can be very helpful
  - Paracetamol is not helpful in management of long term osteoarthritis