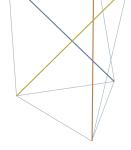
DR. CHRIS HOMAN solving problem pain



PAIN MEDICATIONS

There are only six classes of medications that are commonly used in the treatment of chronic pain. In the future we will increasingly be using drugs from a 7th class – the cannabinoids from marijuana.

Adequate early pain relief (e.g. post surgery / trauma) can drastically reduce long term drug requirement because unrelieved pain tends to snowball over time.

Combining agents from different drug classes can help attain the best outcome.

All drugs have varying responses in different individuals and starting a pain medication should be seen as a "clinical experiment" for the patient. The medication should be ceased if there is no clear benefit or if sideeffects are too great.

DRUG CLASSES

Paracetamol (e.g. Panadol)

Provides relief from mild pain

Minimal side-effects but toxic to the liver in overdose

Anti-inflammatories

NSAID's (non-steroidal anti-inflammatory drugs e.g.
 Nurofen, Voltaren) are the original anti-inflammatory
 medications. NSAID's provide mild pain relief for
 most conditions. NSAID's are most effective for
 inflammatory conditions such as arthritis. A dramatic
 response to NSAID's should raise the prospect of an
 autoimmune condition, e.g. ankylosing spondylitis.

- COX-2's (cyclo-oxygenase inhibitors e.g. Celebrex, Mobic). These drugs have a more targeted antiinflammatory action than NSAID's and largely avoid the risk of stomach ulcers. Otherwise similar to NSAID's, though perhaps slightly weaker.
- Steroids (e.g. Prednisone tablets):
 - Injections (e.g. celestone) peripheral and spinal joints. Provide targeted anti-inflammatory action with minimal systemic side-effects. Useful for inflamed tendon attachments and joints.
 - Systemic (e.g. prednisone) provide body-wide
 suppression of inflammation. Best used in a 7-10 day
 burst, as side-effects rapidly increase beyond that.

Opioids (narcotics from the morphine family)

- Codeine weakest opioid that is ineffective in 30% of patients. Codeine is the most common cause of drug dependency and causes as many problems as it solves when used long term for headaches. 50% of patients suffer rebound headaches for up to 2 weeks when ceasing.
- Targin long acting oxycodone combined with naloxone gives 12 hour dose without constipation.
 Moderate strength opioid. Unattractive to addicts due to naloxone. Various patches allow several days relief per application.

Anti-epileptics / nerve membrane stabilisers

Aim to decrease the sensitivity of pain nerves and reduce the likelihood of them firing off pain signals.

- Traditional anti-epileptics e.g. sodium valproate.
- GABA-system medications e.g. Lyrica. Best to build dose slowly over one week to avoid "getting to know you" side effects. Best for neuropathic pain including spinal nerve root pain.

Anti-depressants

Tricyclics

"Old fashioned" antidepressants in use since the 1960's. E.g. Endep can be particularly helpful when sleep deprivation is worsening the pain experience. Take at 6pm to avoid morning hangover. Start with 10mg at night and be prepared to increase dose every 10-14 days as tolerance develops. Tendency to cause weight gain.

SSRI / SNRI's

"New generation" anti-depressant / anti-anxiety medications. Consider if anxiety / depressive symptoms are prominent.

Anaesthetic agents

- Local short / long acting (e.g. xylocaine)
 Can be very helpful in isolating the source of pain.
- Systemic

E.g. IV Ketamine infusions in hospital to reset the pain system. Usually administered under the care of a pain medicine specialist with an anaesthetics background.

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