

The image features an abstract background with a dark blue to black gradient on the left and a lighter blue gradient on the right. A curved white line separates the two gradients. The text 'RNs' is centered in a gold, serif font.

RNs

Goals of Treatment/Therapy?

(see Fact Sheet 6.1 and Ashburn et al Lancet 1999: 353:1856-69)

- Acute problem – eliminate/manage pain for short period and seek cure. Few social effects.
- Chronic problem – eliminate/manage pain problem and maximize independence for long-term (e.g. maintain mobility, ADLs, safety, consciousness). Multimodal Rx with moderate role for drugs. Note that analgesia may reduce pain only 30-50%, for persistent pain.
- Palliation – eliminate pain and maintain comfort, even if rest in bed (i.e. terminal cancer). Multimodal Rx with major role for drugs.

Pharmacological Treatments for Chronic Pain

- Has pain charting begun?
- Use around the clock analgesia, with paracetamol (1 gm 6 hrly) drug of choice for musculoskeletal pain of mild to mod. intensity
- PRN analgesia required for break-through or pre-emptive incident pain. If frequent PRNs given, need review.
- If moderate to severe pain, LMO will want to work up the WHO ladder.

WHO Ladder

Non-opioid
e.g. paracetamol

Weak opioid
e.g. paracetamol

Strong opioid
e.g. morphine

MILD

MODERATE

SEVERE

Analgesics for Older People

- In older people with chronic pain, the LMO may avoid NSAIDs, including aspirin and COX2 inhibitors.
- Increasingly, LMOs will bypass step 2 of WHO ladder and use low dose strong opioids, such as oxycodone (Endone), when confronted with severe pain.
- Generally, LMOs will start low and go slow with opioids.
- After appropriate opioid dose attained, SR opioid or opioid patches may be prescribed.
- If neuropathic pain suspected, LMO may prescribe an adjuvant drug like gabapentin.

A Brief History of Non-Opioid Analgesics

- 400BC - Hippocrates specifically refers to willowbark (*Salix alba*) for medicinal use.
- 1899AD - Aspirin, a derivative of “salicylate”, is the first NSAID to be marketed.
- 1955 - Paracetamol, the nontoxic, analgesic component of phenacetin, first marketed.
- 1930 to 1970 - Bex and Vincent powders (“mother’s little helpers”) marketed, containing aspirin, caffeine and phenacetin
- 1980s - Phenacetin banned due to it causing kidney and liver failure.
- 1991 – Aspirin and other NSAIDs, but not paracetamol, identified as high risk factor for peptic ulcers, particularly in older people
- 2004 – the new generation NSAIDs under cloud, after Vioxx is withdrawn and related COX2 inhibitors (e.g. Celebrex and Mobic) are required to add warnings regarding potential cardiovascular risks

Paracetamol

- Drug of choice for mild to moderate pain.
- Can also reduce fever.
- Does not reduce inflammation and increase risk of peptic ulcers (unlike aspirin and NSAIDs).
- Does not increase bleeding risk (unlike aspirin and NSAIDs).
- Safe in the elderly. Care required if there is liver impairment.
- One or two 500mg tablets 4- to 6-hourly to max of 4g/day
- Also called Panadol, Panamax, Herron, Febridol. And acetaminophen or Tylenol in America.

Other Formulations of Paracetamol

Extended release preparations

- such as Duatrol, Panadol Osteo
- for BD or TDS use, that is- two 665mg tablets
- 6- to 8-hourly, to max of 6 tablets/day

With 8 and 30mg Codeine

- such as Panadeine and Panadeine Forte
- not for long-term use in elderly (poor efficacy, constipating, ceiling effect)

A Brief History of Opioids

c.2000BC-power of opium poppy known since at least Minoan times

1973 – Candy Pert discovered opioid receptors in the body.

1975 – Scottish researchers discovered “endogenous morphine” or endorphins.

Now - know there are 3 different endogenous opioid genes which make endorphins, dynorphin and enkephalins.

Some Opioids

(see Fact sheet 6)

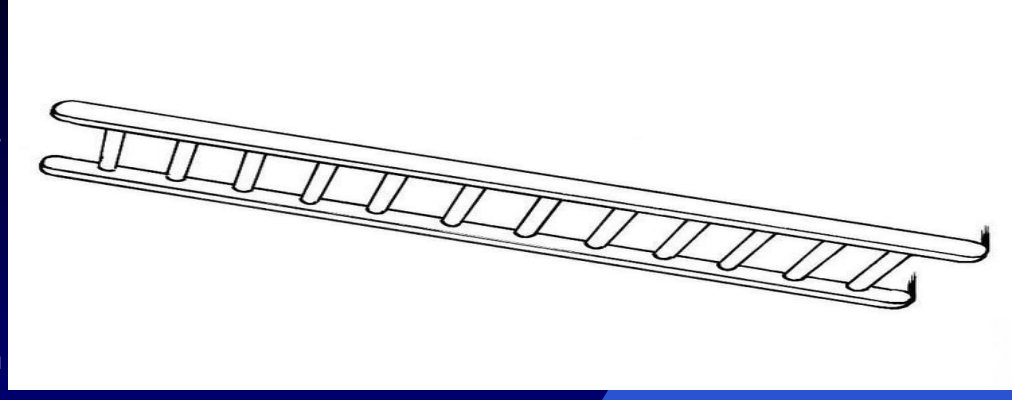
Oxycodone (Endone, Oxynorm)
Morphine (Ordine)

Slow Release Oxycodone (Oxycontin)
Slow Release Morphine (MS Contin, Kapanol)

Buprenorphine in patch form (Norspan)
Fentanyl (stronger opioid) in patch form (Durogesic)

The New Analgesic Patch Ladder?

<u>Patch</u>	<u>Equiv. Oral Morphine Daily Dose</u>
Durogesic 100mcg/hr	240-400mg
Durogesic 75	180-300
Durogesic 50	120-200
Durogesic 25	60-100
Durogesic 12	20 - 60
Norspan 20	36 - 53
Norspan 10	18 - 26
Norspan 5	9 - 13



Very Approx. Morphine Equivalence

12.5micrograms fentanyl (e.g. Durogesic 12 patch over 3days)

Buprenorphine (e.g. Norspan 20 patch over 7days)

20 milligrams oxycodone (e.g. 5milligrams Endone qid)

30mg morphine (e.g. 10ml Ordine (1mg/ml) tds)

300mg Tramadol (e.g. 1-2 X 50mg Tramal tablets qid)

240mg codeine (e.g. 8 tablets Panadeine Forte)

240mg codeine (e.g. 30 tablets Panadeine)

!death by constipation

!death by liver failure

Potential Side-Effects of Opioids

(see Fact sheet 6)

Constipation

Sedation

Falls

Cognitive changes

Nausea

Rarer neuroendocrine and immunological effects

Treatment for Constipation

- Opioid-related side-effects, with the exception of constipation, tends to decrease with time.
- Increase fluids (1.5-2.0 litres per day if heart and kidneys alright)
- Increase activity (30 mins walk if possible)
- Increase dietary fibre (vegies, fruit, wholegrain)
- Laxative initiated at time of opioid prescription and given regularly

Some Laxative Treatments

ORAL

- Coloxy/senna commonly given 2 tablets nocte, BD or TDS (combination stool softeners and bowel stimulants).
- Movicol sachets 1-3 sachets a day for chronic constipation each in a glass of water (osmotic laxative).

RECTAL

- Glycerol suppository (osmotic laxative with 5-30' action)
- Microlax enema (osmotic laxative with 2-30' action)

Non-Pharmacological Treatments

(see Fact sheets 3 & 7 of PMG Kit)

- Possible surgery?
- Improved manual handling
- Relaxation therapy/stress management/diversional therapy
- Maintain usual physical and social activities as much as possible-OT and activities staff are vital
- Is weight loss required?- a dietician referral
- Physiotherapist may suggest specific exercises to prevent deconditioning, hydrotherapy, heat packs
- Psychology referral? Cognitive-behavioural therapy or Arthritis Australia self-management education programs
- Massage therapy or other CAMs (e.g.acupuncture, Reiki, yoga)
- Snoezelen room