Let’s start........

Older person’s reflection about pain

“I feel like a dog thrown in the middle of a street.” Anne Sutton, 85.

“Living with pain” is a contradiction in terms. Why? If you are constantly in pain, you don’t have a life.” Vanessa Wilson, 65.

“...but my chronic cancer pain is something which nobody really wants to know about and this results in a feeling of ‘you’re on your own’.” Annalise Sutton, 78.

What’s old about cancer pain in the elderly?

1) The majority of individuals with cancer are elderly. Projections suggest that approximately 60% of cancer incidence and 70% of cancer-related mortality will occur in individuals aged 65 and older.

2) The burden of pain in individuals with cancer is well documented (almost 100%)

3) Limited attention has been paid to the management of cancer pain treatment with a focus on the elderly population.

The main evidence about cancer pain in elderly

Impact on
• Function
• Pain Management
• Impaired cognitive function
• Quality of life

What about management of pain in your patients?

I treat almost 70% of my patients with severe pain.
**What about your oncologist’s management of your pain?**

*My doctor does not ask me about pain (1/3)*

*My doctor prevalently uses low dose opioids and NSAIDS*

**The etiology of cancer pain in the elderly**

- As a result of diagnostic or therapeutic interventions 19-25%
- Cancer induced syndromes <10%
- Pain unrelated to malignancy or treatment 3-10%
  - comorbidities

**Types of cancer pain in the elderly**

- Nociceptive: Direct response to tissue injury
  - Includes musculoskeletal (somatic) and visceral pain
- Neuropathic: Pain associated with damage to the nervous system
  - Mixed pain syndromes

**Questions about cancer pain in the elderly**

*How to treat?*

**The three step ladder for cancer pain relief**

**Barriers to effective pain management**

Study of 805 chronic pain sufferers, >50% changed physicians due to lack of physician’s:

1) Willingness to treat the pain aggressively,
2) Failure to take the pain seriously,
3) Lack of knowledge about pain management

*“Nothing goes, yes?”*  

**The most reliable indicator of the existence pain and its intensity is the patient’s description.**
The first step for cancer pain relief in elderly

All of these drugs have a ceiling effect and NSAIDs are noted for possible side effects including gastrointestinal ulceration/bleeding, renal impairment, salt/fluid retention and exacerbation of heart failure. The elderly are at an increased risk for these side effects. Consequently, they have suggested introduction of opioid analgesic drugs in the course of cancer related pain.

The American Geriatric Society guidelines highlight the probability that long-term NSAID use is associated with greater adverse events than long-term opioid use. Consequently, they have suggested introduction of opioid analgesia early in the course of cancer related pain.

There are proponents for skipping this step, arguing that cancer pain of moderate intensity should be immediately treated with Step 3 opioids.

Reasons: tramadol induces serious stipsis
• Codein, other than its known side effects, is not metabolized by 10% of Caucasian population

The second step for cancer pain relief in elderly

The third step for cancer pain relief in elderly

Chronic cancer pain frequently requires strong opioids and this is no exception in the elderly.

Due to pharmacokinetic and physiological changes in the elderly, the titration of opioids in the elderly should be undertaken with greater caution. A prudent approach is to begin with an immediate release opioid and slowly titrate according to analgesia and side effects.

There is no ceiling dose for opioids, with doses being limited by side effects alone.

If unacceptable side effects occur, consider switching to another opioid.

Another option is to add adjuvant analgesics or non-opioid analgesics in an attempt to decrease the opioid dose while maintaining adequate analgesia.

Step 4 of the WHO analgesic step ladder is considered when there is inadequate response to step 3 agents, due either to inadequate pain control or inability to tolerate the step 3 agents.

These treatment options include the use of nerve blocks, as well as spinal administration of local anaesthetics, opioids and other adjuvants.

Oral administered ketamine

Proper application of these guidelines can lead to effective analgesia in 90% of cases...but...

Unique Aspects of Analgesic Therapy in the Elderly have to be considered

- Decreased renal and hepatic function
- Changes in body fat that increase the distribution of lipid soluble analgesics
- Changes in volume of distribution that increase the effect of hydrophilic drugs
- Decreased colonic motility, making administration of sublingual and transmucosal formulations challenging
- Decreased salivary production, affecting bioavailability of sublingual products
- Decreased oral health, predisposing to delayed opioid related constipation

Adjuvant drugs
- Duloxetine and pregabaline in neuropathic pain
- Corticosteroids
- Tricyclic Antidepressants
- Selective Serotonin Reuptake inhibitors
- Bisphosphonate
- Topical analgesics
And now a little about opioids...

• Bind to one or more of the opiate receptors (mu, kappa, delta)
• Mu receptor is 7 transmembrane G protein coupled receptor - binding stabilizes the membrane so neuron doesn’t fire
• Where are the mu receptors? - periphery, dorsal root ganglia of spinal cord, periaqueductal grey of brainstem, midbrain, gut

Pain Management and Older Adults

• Need frequent re-assessment - effectiveness of analgesia - ADLs/ functional status - adverse effects - constipation - ? unusual behaviors may be a sign of an adverse drug effect

Is there any evidence that one opioid is better than another?

- Evidence of some differential stimulation of opiate receptors among opioids.
- Good clinical evidence lacking so far about clinical significance of these differences.
- Also limited clinical evidence about differences in adverse effect profiles between different opioids.

The best opioid should:

1. Avoid constipation
2. Avoid other drugs interactions

Which opioid???

• Naloxone - oxycodone in association
The Phase III clinical trial programme, which included 1,064 patients, demonstrated that Targin provides equivalent pain relief to prolonged-release oxycodone alone, whilst significantly reducing the risk of opioid-induced constipation.

Targin has also been proven to provide pain relief that lasts for up to 12 hours from the first dose.

MOR binding (Rat Brain Membranes)

Functional NA-Transporter Inhibition (Rat Synaptosomes)

50 times lower MOR affinity compared to Morphine

Tapentadole: “more than MOR”

Risk of oxycodone and oxycodone/enalapril in cancer pain management.

Abstract

Oxycodone is a potent opioid analgesic that may be administered orally or as a sustained-release formulation. It is useful in the management of pain associated with a variety of conditions, including cancer-related pain. However, the use of oxycodone is limited by the potential for respiratory depression, constipation, and other side effects. Enalapril is a diuretic that is often used in conjunction with oxycodone to reduce the risk of adverse effects.

The use of oxycodone and enalapril in cancer pain management is discussed, with a focus on the potential benefits and risks associated with their use. The efficacy and safety of oxycodone and enalapril in cancer pain management are evaluated, with particular attention to the prevention and management of respiratory depression and constipation. The role of enalapril in the management of cancer pain is also considered, with a focus on the potential benefits and risks associated with its use.

Tapentadole is a novel, non-opioid analgesic that is being investigated for the treatment of pain associated with a variety of conditions, including cancer-related pain. Tapentadole has been shown to be effective in the management of pain associated with cancer-related pain, with a lower risk of respiratory depression and constipation compared to oxycodone and enalapril.

The use of tapentadole in cancer pain management is discussed, with a focus on the potential benefits and risks associated with its use. The efficacy and safety of tapentadole in cancer pain management are evaluated, with particular attention to the prevention and management of respiratory depression and constipation. The role of tapentadole in the management of cancer pain is also considered, with a focus on the potential benefits and risks associated with its use.

Swapping From Methadone to Tapentadole for Cancer Pain

Rehabilitation Medicine, MD

Tapentadole in cancer pain management: a prospective open-label study.

This article discusses the use of tapentadole in cancer pain management. The study involved patients with cancer-related pain who were switched from methadone to tapentadole. The results of the study show that tapentadole is effective in the management of pain associated with cancer-related pain, with a lower risk of respiratory depression and constipation compared to methadone.

The use of tapentadole in cancer pain management is discussed, with a focus on the potential benefits and risks associated with its use. The efficacy and safety of tapentadole in cancer pain management are evaluated, with particular attention to the prevention and management of respiratory depression and constipation. The role of tapentadole in the management of cancer pain is also considered, with a focus on the potential benefits and risks associated with its use.
Non-drug treatment

- Cognitive-behavioral therapy: Pain is influenced by cognition, affect and behavior.
  Conducted by a trained therapist, focuses on changing individual cognitive activity to modify associated behavior, thoughts, and emotions.
  10-12 weekly individual or group sessions
  Participants have to be cognitively intact
- Operant behavior therapy: Use of negative and positive consequences to modify the behaviors.
- Mind-body conditioning practices: Yoga, tai chi, qi gong.

Norelli L, et al., Behavioral approaches to pain management in the elderly, JAGS, Clinics in Geriatric Medicine, 2008.

Take home message

1) Avoid the use of NSAIDS and selective COX-2 inhibitors.
2) Weak opioids are characterized by extreme variability in response rate as well as a poor toxicity profile
3) We suggest the use of strong opioids at low starting doses, administered orally according to all international guidelines. Transdermal formulations are not recommended as first choice due to the variability in cutaneous drug absorption.
4) To date, the most solid evidence supports the use of oxycodone and transdermal buprenorphine (in patients with renal failure)
5) Results from ongoing studies on oxycodone-naloxone combination and tapentadol are awaited. Due to their favorable pharmacological profile, these drugs may improve the therapeutic strategy in this particular subset of patients.

Thanks for attention