Pain Management in palliative care: What is the best current evidence telling us?

Key Messages

- The majority of pain in palliative care patients can be effectively treated with available drugs and best practice management strategies, which includes regular assessment of pain with validated assessment tools [1-2]. For more - see CareSearch Pain assessment tools

- A comprehensive approach to cancer pain begins at diagnosis, should be mechanism-based and multimodal, and must be tailored to the individual patient [3-4]. For more - see CareSearch Health service issues in pain management

- Strong evidence supports treating cancer pain with non-steroidals, opioids, radionuclides and radiotherapy [5]. Bisphosphonates are effective in the treatment of malignant bone pain [6]. For more – see CareSearch Radiotherapy and adjuvants

- Oral morphine, oxycodone and hydromorphone all have similar efficacy and toxicity in opioid naïve cancer patients [7]. According to recently updated recommendations from the European Association of Palliative Care, any of these opioids can be used as first line strong (or step III) opioids [8]. For more – see CareSearch Opioid analgesics

- Provision of “around the clock” coverage by long-acting strong opioids with “as needed” doses of immediate release opioids continues to be recommended as best practice for moderate to severe cancer pain [2]. For more – see CareSearch Opioid analgesics

- Recent evidence-based guidelines for neuropathic pain [8-10] suggest that two groups of medications may be used as first line adjuvant treatment – of the antidepressants, either the tricyclic drug amitriptyline [8], or duloxetine or venlafaxine [9-10], and of the anticonvulsants, either gabapentin [8] or pregabalin [9-10]. Opioids are also effective in neuropathic pain, and should be co-administered as first line treatments, alongside adjuvants [2, 10].

Active research areas and controversies in palliative care pain research

- Much of the evidence about pain management comes from studies in populations quite different from palliative care patients [11-12]. Studies of acute pain, single dose studies of particular analgesics, and studies in non-malignant pain syndromes like post herpetic neuralgia and diabetic neuropathy all contribute to the evidence, but results must be treated with care when extrapolated to a palliative care population.

- Recommendations on managing breakthrough pain are emerging [8] and include suggestions for individually titrated, rather than a fixed ratio to the background opioid but high level evidence is still lacking. New ways of delivering breakthrough opioids are also in development, including a “pain pen” which may make the subcutaneous route a manageable breakthrough option for patients in the community [13].

- A recently completed RCT of ketamine in cancer pain using the “burst protocol” has found that ketamine is no better than placebo, and is associated with a high rate of adverse effects [24].
Further research is needed to identify the most effective pain assessment tools for use in palliative care [14] and to improve processes of routine care so that pain is managed most effectively [11]. Work is underway to develop a computerised assessment tool, based on international consensus on pain assessment [15].

Opioid switching and calculation of equianalgesic ratios between various opioids in different populations and treatment settings is an important research area for palliative care. The information currently provided in equianalgesic tables from different sources is inconsistent, which increases the risk to patients. There is a need to develop a consensus approach to managing opioid conversions [8, 16-17]

Head to head trials of adjuvants in neuropathic pain are needed to strengthen the evidence base [9]. Study designs need to take account of the presence of a significant placebo effect [18].

The associations between pain, depression, and cognitive decline are being studied [19-20]. Other factors such as gender [21] and genetic factors [22] that may relate to individual differences are being identified.

Vertebroplasty and kyphoplasty procedures have been studied for their potential role in malignant vertebral fractures, and there is controversy regarding their safety and effectiveness [23].

REFERENCES
18. Bennett M. Effectiveness of antiepileptic or antidepressant drugs when added to opioids for cancer pain: systematic review. Palliat Med 2011; 25, 553-559