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Breakthrough pain in patients with chronic noncancer pain

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Management of breakthrough pain on a background of chronic noncancer pain – in such patients the term incident pain is preferred – is aimed at improving function and decreasing pain and distress rather than complete relief of pain.

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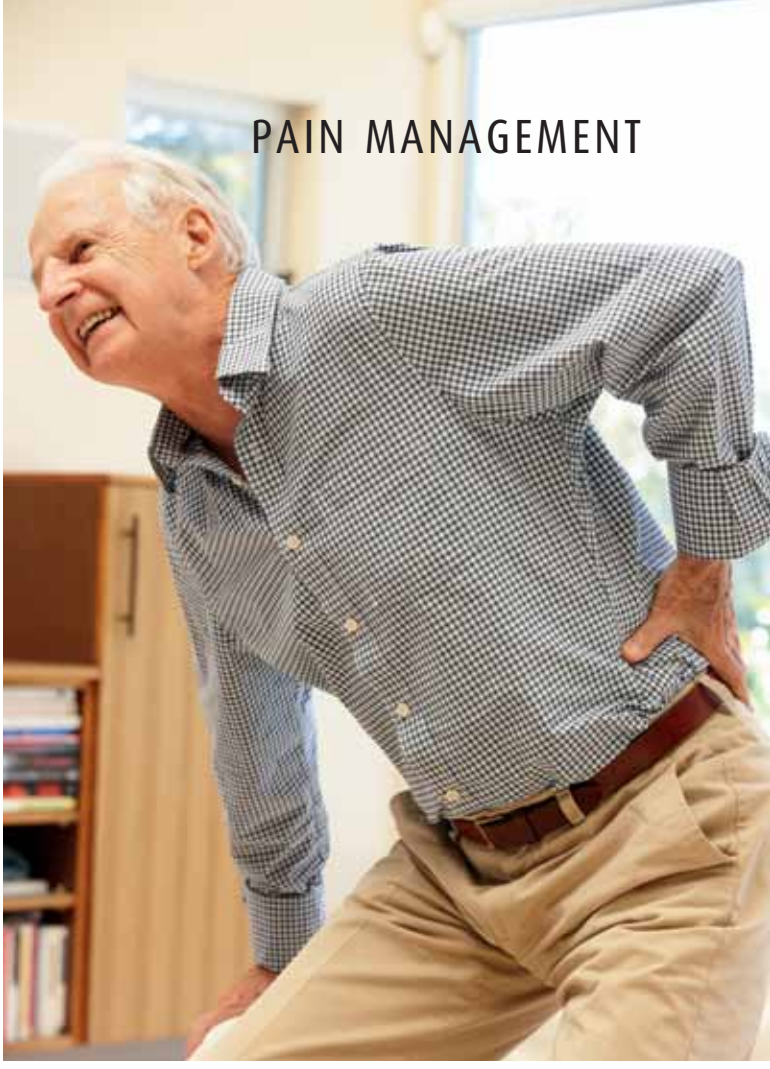

From time to time, patients with persistent or chronic pain present with either increased pain or some variant of breakthrough pain. The term 'breakthrough pain' is derived from cancer pain management and has been defined as a transient worsening of pain breaking through an existing effective analgesic regimen. Because complete analgesia is not always possible for patients with chronic noncancer pain, this term is not widely used in this population.

Instead, the term 'incident pain' is used to describe pain similar to breakthrough pain that occurs as a frequent predictable pain exacerbation brought on by certain activities. This pain may occur on a background of continuous pain, or the patient may be completely pain-free between episodes. Pain on movement or coughing after abdominal surgery is a good example of 'incident pain'.

'Episodic pain' is defined as a spontaneous episode of recurring severe pain when the patient is otherwise pain-free. The term 'episodic pain' can be applied to conditions such as trigeminal neuralgia or certain presentations of herpes zoster. In the chronic pain literature, the term 'flare up pain' is more commonly used.

MANAGEMENT OF INCIDENT PAIN

For a patient with incident pain arising on a background of chronic noncancer pain, the initial assessment and management plan should be reviewed with an emphasis on realistic goals and expectations. An expectation of complete pain relief is doomed to disappointment in patients with chronic noncancer pain, whereas improved function and a decrease in pain and distress may be quite achievable. A clear management plan addressing these issues, with appropriate goals, can be designed with the patient and other healthcare workers, such as physiotherapists.

The management plan should have a range of non-pharmacological and pharmacological options. These may include:

- a gentle regular exercise program
- a clear understanding of pacing of physical activities
- options relating to a healthy lifestyle, such as diet and weight loss if appropriate
- the management of any associated psychological distress, such as anxiety or depression

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- the regular use of nonopioid analgesics such as paracetamol
- an adequate trial of oral opioids (patient compliance with this regimen needs to be discussed).

Differential diagnosis

The differential diagnosis of incident pain requires a further pain history identifying the exact type and nature of the new or worsening pain. 'Red flags' that might suggest new pathology should be excluded. Simple advice about modifying physical activities or strategies to better pace them may be all that is needed.

Treating the cause

The history should allow further classification of the subtype of the pain flare. For example, does the pain come on spontaneously, or is it precipitated? Spontaneous (stimulus-independent) pain is typical of a neuropathic cause and may be associated with words such as 'shooting', 'jabbing' or 'burning'. The more common type of incident pain is usually precipitated (stimulus-dependent) and comes on following increased activity or movement.

If the new or worsening pain is thought to be of a more neuropathic nature and is clearly of spontaneous onset with no precipitating factors, a review of antineuropathic medications would be appropriate. Increasing (or starting) amitriptyline or adding in sodium valproate or pregabalin should be considered.

If the pain is clearly related to physical activity, particular emphasis needs to be placed on activity pacing and modification of the activity or exercise program. This advice needs constant support and regular review with the general practitioner or physiotherapist, or both, until the patient can self-manage their physical activities.

Treating with analgesics

Opioids

A review of the patient's opioid history is appropriate, looking at the total daily dose. How stable has the pain been since commencement on opioids? Is the patient demonstrating a degree of tolerance? Have the 'five As' been regularly reviewed? The five As are:

- Analgesia
- Activity
- Adverse effects
- Affect
- Aberrant behaviour.

Although the use of increasing doses of opioids is not recommended when treating incident pain in patients with chronic noncancer pain, if the total daily dose is well below 100 mg morphine equivalents a day, some increase in the dose of the controlled-release opioid could be appropriate. This may only need to be short-term, with a review in one to two weeks. In general, the use of 'prn' medications such as immediate-release opioids is not recommended for incident chronic pain because of the risk of dose escalation and tolerance; in contrast, these analgesics have great value in acute pain as patients generally decrease their use as the pain improves.

If the total daily dose of opioids is around 100 mg morphine equivalents, further escalation may not be helpful and consideration should be given as to whether the pain is opioid-sensitive. If it is not, focusing on nondrug strategies (as mentioned above) and reassessing antineuropathic pain medications is worthwhile.

Anti-inflammatory medication and tramadol

The short-term use of low-dose anti-inflammatory medication or the opioid-like analgesic tramadol, or both, may be appropriate to help control pain from increased physical activity until the patient has mastered appropriate pacing.

End-of-dose failure

Sometimes patients will describe pain that comes on as the analgesic medication 'wears off'. This is termed end-of-dose failure and may be seen when pain returns nine to 10 hours after administration of a 12-hour controlled-release preparation. Again, depending on the daily dose and compliance with a multimodal treatment plan, options include increasing the daily dose (still given twice a day) up to the previously mentioned 100 mg morphine equivalents per day or dividing the current dose by three and giving the controlled-release preparation three times a day.

CONCLUSION

Incident pain is the preferred term used in patients with chronic noncancer pain to describe pain similar to breakthrough pain, and is defined as a frequent predictable pain exacerbation brought on by certain activities. Management of incident pain on a background of chronic noncancer pain is aimed at improving function and decreasing pain and distress rather than complete pain relief. Nonpharmacological and pharmacological options include gentle regular exercise programs, pacing of physical activities, a healthy lifestyle with diet and weight loss if appropriate, management of any associated psychological distress, regular use of nonopioid analgesics such as paracetamol and a trial of oral opioids. MT

FURTHER READING

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COMPETING INTERESTS: Dr Goucke is on an advisory board for bioCSL and has been on advisory boards of Mundipharma, Janssen-Cilag and Pfizer for which honoraria have been paid.