Topic 38: Chronic musculoskeletal pain: Changing the way we think about pain

Pain associated with musculoskeletal problems is one of the most common reasons for people to seek medical help.\textsuperscript{1-3} The pain, which can be persistent, severe and disabling, is often associated with depression and anxiety.\textsuperscript{2, 3} Traditional management using a narrow biomedical model, where the focus is on finding and treating the underlying pathology, often leaves the patient with limited relief and frustrated with ongoing disabling social, personal and economic issues.\textsuperscript{3, 4}

A biopsychosocial approach, which addresses the tightly integrated physical, psychological and social aspects of chronic pain, delivers better outcomes. This framework focuses on encouraging doctors and patients to think differently about pain.\textsuperscript{5} It positions the patient as an active participant and supports a greater integration of non-pharmacological therapies and a multidisciplinary approach to chronic pain management.\textsuperscript{3, 5}

This therapeutic brief focuses on a biopsychosocial approach to chronic pain and how to engage your patient to be an active participant in their care in order to live well despite their pain.

✔ Explaining pain to your patient

Chronic pain may result from increased neurological sensitivity. In some patients, pain can arise without any preceding injury or evidence of pathology, possibly triggered by psychological and/or environmental factors, making it difficult for the patient to understand their pain or convey their experience of pain to others. Multiple factors can interact to influence how pain is felt, causing the perception of pain to be changeable, often without an increase or change in tissue damage. Emotions, such as depression, anxiety and fear can increase the intensity and perception of pain, perpetuating the problem.\textsuperscript{5}

Educating your patient and explaining the impact of multiple stressors that often contribute to chronic pain can be one of the most empowering therapies you can provide.\textsuperscript{4} A discussion of these mechanisms can change the way your patient thinks about their pain.
Explaining pain to your patient (cont)

It can account for why they feel pain when there is no explanatory pathology and help to validate their pain and reduce associated stigmas, guilt and shame. Acknowledge that pain is real even if it can’t be explained.

An initially difficult, but beneficial concept for the patient to grasp is to change their thinking from ‘pain cure’ to ‘living well despite pain’. Explaining that chronic pain is different from acute pain will help your patient to understand why standard treatments sometimes fail. Once your patient understands that chronic pain is no longer a local issue but reflects much broader issues involving multiple factors, their focus can change and they can concentrate on setting realistic goals within a structured plan. This change in thinking can provide a sense of hope and purpose which in turn can help diminish pain and distress by reducing neural sensitivity and improving functional capacity.

The role of medical imaging

After a thorough history and clinical examination, imaging may further assist in helping to exclude any serious underlying conditions. However, medical imaging, including plain X-rays in the absence of red flags or trauma has limited usefulness. The resulting findings may not correlate with the patient’s symptoms which may cause unnecessary concern for the patient.

For further information about medical imaging refer to NPS MedicineWise website at: http://www.nps.org.au/low-back-pain-when-imaging-not-required

What works?

A multimodal plan

An interdisciplinary team that delivers such treatment modalities as regular exercise, training in relaxation, pacing techniques, group support programs, counselling and education can be highly effective.

Some veterans with chronic musculoskeletal pain may have complex physical, mental and addictive comorbidities, such as posttraumatic stress disorder (PTSD), domestic violence and/or alcohol abuse. Management of these patients can be extremely complex in the primary care setting. Referral to a specialist may be required for the management of these patients.

Self-management

Patients actively engaged in self-management techniques report lower levels of pain-related disabilities, improvement in mood, better general health and lesser use of health services and medicines. These patients also report feeling empowered, having greater satisfaction with their care and are more compliant with treatments. Treatment that is holistic provides support which is important to engage your patients in their care.

Acceptance-based interventions

Self-management is one of the core principles behind cognitive behavioural therapy (CBT) and pain management programs. Acceptance-based interventions, such as mindfulness stress reduction and psychological treatments based on CBT principles have been shown to be effective in delivering improved patient satisfaction. The focus of CBT is to lessen the awareness of pain and enable patients to function despite their pain, rather than to reduce pain itself. The best results are achieved when therapy is combined with other treatments, such as exercise and relaxation techniques.
Medicines

It is widely acknowledged that chronic pain can be complex and difficult to manage. The main role for pharmacological therapies in the management of chronic musculoskeletal pain should be to improve function, and reduce and control symptoms as part of a multimodal plan. Explain to your patient that it is likely medicines will modify, rather than eliminate pain, and highlight the importance of concurrently participating in non-pharmacological therapies. Ask the question ‘Is my patient finding relief with this medicine?’, taking into consideration that the goals of treatment go beyond pain relief alone and encompass quality of life, improving function and providing relief from emotional distress.

Paracetamol, when taken regularly can often modify the severity of pain and act as an adjunct to non-pharmacological or other pharmacological therapies. Encourage your patient to take paracetamol regularly, rather than on an ‘as needed’ basis. As with all medicines, discontinue if there is no benefit after an adequate trial.

Nonsteroidal anti-inflammatory drugs (NSAIDs) may be effective analgesic and anti-inflammatory medicines for symptom relief in the short term. However, as they are associated with gastrointestinal, cardiovascular and renal adverse effects, weigh the benefits against potential harm, particularly in high risk people, such as the elderly. Use the minimum effective dose for the shortest possible time.

Failure of one medicine does not mean that others will also fail (even those medicines in the same class). Patient response to medicines is often individual and unpredictable, so changing/adding and trialling a different medicine is often beneficial. Ask your patient about the use of complementary and alternative medicines, such as omega-3 fish oils, glucosamine and/or chondroitin that may cause adverse effects or interact with other medicines.

Where do opioids fit?

There is no strong evidence to suggest long term use of opioids for chronic non-malignant pain is effective. However, experts in pain medicine believe appropriately prescribed non-injectable opioids can be beneficial for carefully selected and closely monitored patients. Modest short term efficacy of opioids has been shown in patients with musculoskeletal pain.

Given the recent prevalence of oxycodone-associated deaths in Australia (see Box 1) and the large contributing psychological, social and cultural components associated with the experience of pain, opioids should not be the first line of treatment. Conversely, undertreated patients suffering uncontrolled pain remains an important and relevant issue. Balancing the need for patients to receive appropriate pain relief against the need to protect them from adverse effects of any medicine is a key consideration.

Often patients may be prescribed long term opioids including codeine or tramadol as well as those in Box 2. All opioids can cause short term adverse effects, such as drowsiness, constipation, nausea, vomiting and urinary retention, and long term adverse effects such as constipation, sleep apnoea and dependence.

Careful consideration is warranted before initiating opioids, especially in younger patients and in those with complex physical and mental needs.

Box 1: Oxycodone-related deaths in Australia 2001-2009

- There were 465 oxycodone-related deaths
- 75% of the deaths were unintentional
- 82% of the deaths were associated with multiple medicines (commonly benzodiazepines) and alcohol
- Most deaths occurred in 40-49 year olds, followed by 30-39 year olds
- Half of the deceased persons had a history of a chronic medical condition and/or pain

Box 2: Recommended opioid dose limits for non-malignant pain

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Recommended dose limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>morphine</td>
<td>100mg oral per day</td>
</tr>
<tr>
<td>oxycodone</td>
<td>60-80mg oral per day</td>
</tr>
<tr>
<td>methadone</td>
<td>30mg oral per day</td>
</tr>
<tr>
<td>hydromorphone (controlled release)</td>
<td>20mg oral per day</td>
</tr>
<tr>
<td>buprenorphine</td>
<td>40mcg per hour transdermal (two 20mcg per hour patches)</td>
</tr>
<tr>
<td>fentanyl</td>
<td>25mcg per hour transdermal</td>
</tr>
</tbody>
</table>

NOTE: A patient taking doses greater than those listed in Box 2 indicates the need for specialist opinion.
Consider Universal Precautions in Pain remains the principal goal of treatment.17 Reducing distress and improving quality of life and daily functional capacity by using the lowest possible dose. Dependence is best avoided and dependence on opioids may develop insidiously. Complete relief from pain is unlikely and although unpleasant they are not regarded as medically dangerous.25

Principles for prescribing opioids16-18, 22, 23

Consider opioids, as a time limited component of a multimodal and collaborative self-management plan, and apply the following principles stringently:

1. Before considering opioids, conduct an adequate trial of other therapies that includes:
   - non-pharmacological therapies
   - non-opioid therapies

2. A comprehensive assessment of:
   - physical factors – comorbidities
   - psychological factors – beliefs, behaviour and mood
   - social, cultural and environmental factors
   - actual and potential substance misuse, abuse or addiction. The Opioid Risk Tool (ORT) and the CAGE-AID may be useful tools to assess your patient and are available at: http://www.agencymeddirectors.wa.gov/Files/OpioidGdline.pdf

3. A contractual approach ensuring:
   - one prescriber only
   - reasonable and measurable goals, with agreed discontinuation of opioid if set goals are not met
   - goals which include improvement in functional capacity as well as reduction in distress
   - informed consent
   - careful consideration before undertaking long term opioid therapy as they are generally not recommended
   - an understanding that a trial of up to 3 months to optimise functional capacity may be considered, with the time frame for cessation to be negotiated and agreed in advance by the doctor and the patient

4. An understanding that opioids are used only as an adjunct to other modalities

5. Information is provided about potential short and long term adverse effects. Constipation is one of the most common adverse effects of opioid use – a regular combined stimulant laxative and a stool softener is recommended. See Module 27: Opioid-induced constipation – a preventable problem at: www.veteransmates.net.au/TB_opioid_induced_constipation

6. Use of longer acting/sustained release preparations only

7. Avoidance of the use of ‘breakthrough’ opioids

8. An understanding that the use of opioids is always a trial subject to ongoing and frequent evaluation

9. Regular and frequent reviews – consider a Home Medicines Review


Full reference list available on the website: www.veteransmates.net.au

Box 3: Regularly assess the six ‘As’24

1. Analgesia: assess and document pain intensity at baseline and subsequent visits
2. Activities of daily living: assess and note benefits seen in the daily lives and psychosocial functioning of the patient as agreed upon and documented in the management plan
3. Adverse effects: prescribe the lowest dose with the least number of adverse effects. Monitor and treat any adverse effects
4. Aberrant behaviour: assess for behaviour suggestive of drug abuse
5. Assessment: assess the patient’s mood, adverse effects and signs of abuse or tolerance on a regular basis
6. Action plan: have a treatment plan that details the goals of therapy and includes measurable outcomes

Indications for tapering opioid therapy

- adverse effects outweigh benefits
- comorbidities increase risk of complications
- dose regularly exceeds recommended opioid dose limits.25

Indications for discontinuing opioid therapy

- unmanageable adverse effects
- poor compliance
- a desire by the patient to discontinue therapy
- behaviour suggestive of misuse
- therapy ineffective
- pain resolution, 16, 25

Avoid abrupt cessation of long term opioids unless it is in response to violent or criminal behaviour. There is no evidence-based recommended rate at which to wean patients. However, expert opinion suggests a reduction of 5-10% per week or 20% per fortnight or month is realistic.24 This will depend on strength of tablets available. NOTE: some withdrawal symptoms may occur, and although unpleasant they are not regarded as medically dangerous.25