



## Case studies: Pain management and codeine use

These case studies were developed to support the guidance document, *'Tips for talking about codeine: Guidance for pharmacists'*.

### Case 1: Acute pain event



John, a 28 year old male, presents to his local pharmacy with acute ankle pain after a football training accident this evening. He requests ibuprofen combined with codeine as it was recommended by a friend to relieve his pain.

#### What is acute pain?

Acute pain is pain of recent and sudden onset that in most cases is a symptom of injury or tissue damage (such as a sprained ankle pain from a football training accident), an infection in the skin/internal organ (such as appendicitis or tonsillitis), or blocking of blood supply to a limb or the heart. It is important, and usually possible, to identify the cause of the pain, direct treatment to that cause, and to try and reduce the pain itself. This might involve medicines available through the pharmacy and/or non-drug or self-management approaches recommended by you, the pharmacist.

If over-the-counter medicines do not adequately treat the person's acute pain, you should refer them to a health professional with prescribing authority<sup>1</sup> (known as an authorised prescriber) for further assessment.

<sup>1</sup> General practitioner, specialist, clinician, nurse practitioner, midwife, nurse prescriber, dentist

### Action plan

In any person with pain, the focus should be on identifying and managing the underlying cause. Specific treatment for the underlying condition may be required in addition to symptomatic management of the pain.

#### 1 Be empathetic

It is important to build an empathetic relationship with John. When initially seeing a person with acute pain like John, take time to fully understand all the factors that may be involved. This is the first step in building a positive relationship with him.

#### 2 Establish the cause of John's pain

Establishing the cause of the pain will help you assess the situation and manage John's pain. Some example questions are:

- How did you injure yourself? Can you describe what happened?
- On a scale of 1 to 10, with 1 being no pain and 10 being the worst pain imaginable, how bad is your pain right now?
- Can you describe the type of pain you are experiencing (e.g. sharp, dull, tingling)?

- Are you able to weight-bear on the injured foot?
- Do you have any medical conditions?
- Are you taking any medicines that are prescribed, over the counter or complementary?

### 3 Manage John's pain

Once the cause and severity of the pain and a medical history are established, you can develop a plan with John to manage his pain. This plan may *include* analgesics and/or non-drug management.

Some example responses are (provided John does not have any medical conditions and is not taking any medicines):

- The pain you have described to me sounds like acute pain.
- There are non-drug treatments available for your injury. These include the RICE method (Rest, Ice, Compression and Elevation) avoiding HARM (Heat, Alcohol, Running, and Massage) for the first 48 hours and visiting a physiotherapist for further assessment of your injury.
- There are also over-the-counter medicines available that can be used to manage your pain. These include paracetamol, non-steroidal anti-inflammatory drugs (NSAIDs) or combination of paracetamol/NSAIDs. If pain persists despite using an over-the-counter medicine, follow-up by an authorised prescriber is recommended.
- If symptoms worsen or have not subsided 48 hours after the injury, follow-up with an authorised prescriber is recommended.

John's specific request for low dose codeine will also need to be addressed:

- You mentioned your friend's recommendation of ibuprofen and low-dose codeine.
- There is no conclusive evidence to show that low-dose codeine-containing medicines are any more effective than paracetamol, aspirin or ibuprofen.<sup>2</sup> Codeine can also be very dangerous, addictive and potentially deadly, so we do not recommend it. However, I will recommend an alternative for you that can assist you while you are performing the RICE method.

### Consider referral if:

- there is a possibility of a more serious injury, e.g. severe bruising and/or swelling, a possibility of ligament/tendon damage or a broken bone;
- over-the-counter medicines do not effectively treat the acute pain and stronger pain relief is required; or
- John does not have full function of the area, or if the pain and swelling do not subside after a couple of days.

### Additional resources and support

The Therapeutic Guidelines (eTG Complete) website provides information for health professionals on treating acute pain – <https://tgldcdp.tg.org.au/etgAccess>

The Better Health Channel Fact Card: *Sprains and strains* – [www.betterhealth.vic.gov.au/health/conditionsandtreatments/sprains-and-strains](http://www.betterhealth.vic.gov.au/health/conditionsandtreatments/sprains-and-strains)

The Painaustralia website for pain information – [www.pinaustralia.org.au/](http://www.pinaustralia.org.au/)

Pharmaceutical Society of Australia's (PSA) Self Care Fact Card: *Sprains and strains* – [www.psa.org.au/](http://www.psa.org.au/)

<sup>2</sup> AMH online (<https://amhonline.amh.net.au/>) – see 'Codeine'

## Case 2: Recurrent/episodic pain event(s)



Susan, a 48 year old female, presents to her regular, local pharmacy requesting Mersyndol® (paracetamol 450 mg, codeine 9.75 mg, doxylamine 5 mg) for her migraines related to menstrual cycles. She says that this medicine effectively treats her migraines.

### Migraine identification and symptoms

Migraine without aura (common migraine) is characterised by recurrent episodes of headache, often unilateral and throbbing, but without focal neurological symptoms. Nausea, vomiting, photophobia or phonophobia often accompany the pain.

Migraine with aura (classical migraine) is similar to common migraine but associated with neurological symptoms that precede or accompany the headache. Common symptoms are visual disturbances, dizziness, paraesthesiae or impaired speech. Mood disturbances may also be present. In some cases, the aura symptoms may predominate and the headache is mild or short-lived.

Menstrual migraines can occur due to sensitive changes in oestrogen concentrations. When oestrogen levels are stable (e.g. during pregnancy, after menopause) women are often relatively free of migraine attacks. Oestrogen concentrations fall immediately before menstruation and can trigger a migraine attack.<sup>3</sup>

## Action plan

### 1 Be empathetic

It is important to build an empathetic relationship with Susan. When initially seeing a person with recurrent/episodic pain like Susan, take time to fully understand all the factors that may be involved. This is the first step in building a positive relationship with her.

### 2 Establish the level and frequency of Susan's pain

Assessing Susan's level of pain and the frequency of her migraines may help you recommend treatment. Some example questions are:

- You mentioned you get migraines with your period. Do you suffer from migraines at other times? How often do you experience them?
- What symptoms do you experience when you get a migraine?
- What medicines, besides Mersyndol®, have you used to treat them before? Have you had success with any other medicine before?
- Have you tried any non-drug therapies before? Have you had success with them before?
- How long after experiencing the first sign of your migraine do you take your medicine?
- Have you been reviewed by your authorised prescriber about this? If yes, what did they suggest?
- Has your authorised prescriber mentioned pain management clinics or a pain specialist before?
- Have you heard of multidisciplinary pain management?
- Do you have any medical conditions?
- Are you taking any medicines that are prescribed, over the counter or complementary?

<sup>3</sup> [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) (<https://tgldcdp.tg.org.au/etgAccess>) – see 'Neurology, Headache, Migraine Headache'

### 3 Management and treatment

Once the assessment is complete you can recommend treatment for Susan.

Some example responses are (provided Susan does not have any medical conditions and is not taking any medicines):

- Rest in a quiet, darkened room and to avoid movement or any activity (including reading or watching television).
- Aspirin or other nonsteroidal anti-inflammatory drugs (NSAIDs) are considered first-line treatment for migraines, which are available over the counter.
- Large doses of these medicines may be required and soluble formulations are preferred as migraines impair drug absorption in the stomach.
- As an attack builds, stomach emptying is delayed and eventually nausea develops. A delay in taking medicine may result in them being erratically absorbed or vomited and may be a reason for treatment failure. Taking the appropriate medicines as soon as the first sign of the migraine appears may help with treatment.
- Medicines that are effective against nausea and vomiting are known as anti-emetics. Anti-emetics may help associated nausea, increase absorption of pain relief medicines and as a result may also reduce migraine pain.
- If an NSAID or paracetamol alone do not relieve an attack, or if nausea is a problem, anti-emetics, such as metoclopramide or prochlorperazine, can be taken and are available over the counter.
- For menstrual migraines, a short-term preventative medicine may be effective in women with regular cycles. Preventive treatment is taken before and during the expected time of the attack. Longer acting NSAIDs (e.g. naproxen) should be commenced 48 hours before the anticipated attack and may help prevent a migraine from forming. It is to be continued beyond expected duration of the attack (duration of treatment is 4 to 10 days).<sup>4</sup>

Susan's request for low dose codeine will also need to be addressed.

- There is no conclusive evidence to show that low-dose codeine-containing medicines are any more effective than paracetamol, aspirin or ibuprofen.<sup>5</sup> Codeine can also be very dangerous, addictive and potentially deadly, so we do not recommend it.
- Furthermore, opioid analgesics, such as codeine, should be used with caution in the treatment of migraine, and **only after all other measures have failed**.

### Consider referral if:

- Susan has taken the first-line treatments outlined above and there has been no improvement after 1 to 2 hours, or if first-line treatments have not been successful in previous attacks. Referral to an authorised prescriber is required for prescription medicines, such as triptans; or
- Susan presents regularly for pain relief for migraines (more than two to three migraines per month). Trials of preventative treatment may be appropriate with prescription medicines and referral is required.

### Additional resources and support

The [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) website provides information for health professionals on treating migraines – see '*Neurology, Headache, Migraine Headache*' – <https://tgldcdp.tg.org.au/etgAccess>

The [Better Health Channel](http://www.betterhealth.vic.gov.au/health/conditionsandtreatments/headache-migraine) Fact Card: *Headache - migraine* – [www.betterhealth.vic.gov.au/health/conditionsandtreatments/headache-migraine](http://www.betterhealth.vic.gov.au/health/conditionsandtreatments/headache-migraine)

The [Painaustralia](http://www.painaustralia.org.au/) website for pain information – [www.painaustralia.org.au/](http://www.painaustralia.org.au/)

[PSA](http://www.psa.org.au/) Self Care Fact Card: *Pain relievers* – [www.psa.org.au/](http://www.psa.org.au/)

<sup>4</sup> [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) (<https://tgldcdp.tg.org.au/etgAccess>) – see '*Neurology, Headache, Migraine Headache*'

<sup>5</sup> [AMH online](https://amhonline.amh.net.au/) (<https://amhonline.amh.net.au/>) – see '*Codeine*'

## Case 3: Persistent (chronic) pain



Mark, a 55 year old male, presents to his regular pharmacy and requests Nurofen Plus® (ibuprofen 200 mg, codeine 12.8 mg) to help his lower back pain. After discussing Mark's condition with him further, he advises he uses Nurofen Plus® daily (up to three times per day but never more) to help his pain. He has been doing this for the last 2 years while he awaits lower back surgery.

### What is chronic pain?

Chronic pain is usually defined as pain that is present after the initial healing time has elapsed, typically for three months or more. However, not all cases of chronic pain start with an episode of acute tissue damage. Although most episodes of acute pain resolve when the underlying injury or disease process heals, some conditions, such as inflammatory arthritis or peripheral neuropathy, are characterised by ongoing disease processes that may cause persistent pain. In some cases, the originating process is no longer active but pain persists because of lasting changes within the nervous system; and in other cases the cause of the pain is unclear and develops without any readily recognised pathology.

Chronic pain not treated adequately in the pharmacy should be referred to an authorised prescriber.

Chronic pain is complex, as it involves not only what may be happening in the person's body, but also what is happening in their lives. Just as acute pain can be accompanied by anxiety, chronic pain can be associated with major changes in mood and how the person functions at home, work, with family or in society. This multidimensional aspect of pain means that the person requires a skilled and comprehensive assessment and a multimodal approach to treatment that does not rely on medicines alone. Referral to an authorised prescriber is necessary.

## Action plan

### 1 Be empathetic

It is important to build an empathetic relationship with Mark. When initially seeing a person with chronic pain like Mark, take time to fully understand all the factors that may be involved. This is the first step in building a positive relationship with him.

### 2 Establish the level of Mark's pain

Establishing the level of Mark's pain will help you assess the situation and assist with the management of Mark's pain. Some example questions are:

- How long have you had back pain for?
- How did you originally injure your back?
- On a scale of 1 to 10, with 1 being no pain and 10 being the worst pain imaginable, how bad is your pain right now?
- Can you describe the type of pain you are experiencing (e.g. sharp, dull, tingling)?
- Besides Nurofen Plus®, what other medicines have you tried?

- Have you tried any non-drug treatments/therapies such as physiotherapy, hydrotherapy, exercise, acupuncture etc.? If yes, have you found them helpful?
- Have you spoken to your authorised prescriber about managing your back pain while you wait for surgery?
- Has your authorised prescriber mentioned pain management clinics or a pain specialist before?
- Have you heard of multidisciplinary pain management?
- Do you have any other medical conditions?
- Are you taking any medicines that are prescribed, over-the-counter or complementary?

### 3 Treat every person differently

Although some general principles can be applied, each person with chronic pain should be treated differently. It is important to stress that the aim of treatment is pain *management* and increasing function, rather than pain *cure*.

- Explore Mark's understanding of his pain problem and identify any unhelpful or incorrect beliefs that may have been adopted.
- Ask Mark about his expectations and goals of treatment to help determine an appropriate treatment strategy. Explain the difference between pain management and pain cure.
- Consider Mark's response to previous treatments to help determine what further treatments may be offered.

### 4 Management and treatment

Chronic pain is very specific and requires referral to an authorised prescriber as it cannot be adequately treated with medicines alone. Once the level of Mark's chronic pain and a medical history are established, you can refer him to his authorised prescriber for pain management.

It is important to explain to Mark why you are referring him to an authorised prescriber and not supplying him with a codeine-containing medicine. The best way to manage chronic pain is to use a multidisciplinary pain management approach.

A useful approach is to change the paradigm from 'pain cure' to 'pain management'. This can be one of the most difficult concepts for the person to accept – explaining why chronic pain is different to acute pain and the reasons why standard treatments often fail to cure chronic pain.

Some example responses are:

- Chronic pain is a very complex condition that requires a multidisciplinary pain management approach. Therefore, it is best that I refer you to your authorised prescriber.
- If you are experiencing shooting or burning pain, tingling and/or numbness, you may be experiencing neuropathic pain. Neuropathic pain is best managed by your authorised prescriber and often requires prescription medicines and/or other therapies for treatment. Over-the-counter medicines do not play a role in treating neuropathic pain.
- Non-drug treatments may help reduce chronic pain to a level that is easier to control. These include physiotherapy, mind-body techniques, psychological techniques, occupational therapy, massage, acupuncture, exercise, lifestyle changes, and active self-care management.
- Your authorised prescriber is best placed for a comprehensive clinical assessment of pain. If your authorised prescriber is not successful at managing your pain, they will need to refer you to a pain specialist.



Mark's request for low dose codeine will also need to be addressed:

- Codeine-containing medicines are not intended or helpful for the long-term treatment of chronic pain and do not provide very any relief from neuropathic pain. Furthermore, inappropriate long term use of low dose codeine-containing medicines for chronic pain is associated with health risks. These may include developing tolerance and dependence, and associated side effects from long term consumption of paracetamol and ibuprofen, which are potentially life threatening (see Case Study 4 for more information on excessive use).
- Additionally, there is no conclusive evidence to show that low-dose codeine-containing medicines are any more effective than paracetamol, aspirin or ibuprofen.<sup>6</sup>

For many people with chronic pain, non-drug interventions reduce the pain to a level that is easier to control. For others, the pain may persist. However, they may be better able to cope with the pain and minimise its effect on their lives.<sup>7</sup>

## Consider referral if:

- a person presents with chronic pain, as referral to their authorised prescriber is always recommended; or
- neuropathic pain symptoms are present; or
- you think there is a possibility of codeine dependency.

## Additional resources and support

The [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) website provides information for health professionals on managing chronic pain – see '*Analgesic, Chronic pain: overview*' – <https://tgldcdp.tg.org.au/etgAccess>

The [Better Health Channel](http://www.betterhealth.vic.gov.au/health/conditionsandtreatments/Living-with-persistent-pain) Fact Card: *Living with persistent pain* – [www.betterhealth.vic.gov.au/health/conditionsandtreatments/Living-with-persistent-pain](http://www.betterhealth.vic.gov.au/health/conditionsandtreatments/Living-with-persistent-pain)

The [Painaustralia](http://www.painaustralia.org.au/) website for pain information – [www.painaustralia.org.au/](http://www.painaustralia.org.au/)

The NSW Health website [Pain Management Network](http://www.aci.health.nsw.gov.au/chronic-pain/chronic-pain) for chronic pain information – [www.aci.health.nsw.gov.au/chronic-pain/chronic-pain](http://www.aci.health.nsw.gov.au/chronic-pain/chronic-pain)

[PSA](http://www.psa.org.au/) Self Care Fact Card: *Chronic Pain* – [www.psa.org.au/](http://www.psa.org.au/)

<sup>6</sup> AMH online (<https://amhonline.amh.net.au/>) – see '*Codeine*'

<sup>7</sup> [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) (<https://tgldcdp.tg.org.au/etgAccess>) – see '*Analgesic, Chronic pain: overview*'

## Case 4: Excessive use



Jane, a 36 year old female, presents to the pharmacist requesting Panadeine Extra® (paracetamol 500 mg, codeine 15 mg) for dental pain. She notes she has used the medicine before. You check any real-time monitoring system that is in place to find that Jane has an alert regarding the misuse of over-the-counter codeine-containing medicines.

### Dependence

Dependence on codeine can arise following the self-treatment of chronic pain with over-the-counter codeine-containing medicines.

Substance use disorder (SUD) is a medical condition where a person has lost control over the amount of medicine they use and can continue to use them despite experiencing harm.

As a pharmacist, a complete diagnosis of SUD is outside of your scope of practice and referral to an authorised prescriber is necessary for assessment and treatment planning, which may include detox or initiation of opioid pharmacotherapy. However, you will be able to establish if there is a possibility of SUD, such as tolerance or dependence. Even when therapeutic doses are taken (i.e. no more than the maximum dose every day), dependence can develop, and withdrawal symptoms can emerge on cessation. Symptoms of withdrawal may appear as a worsening of a pain condition (e.g. re-emergence of headaches (such as analgesic medicine overuse headache), muscle pain, cold and flu symptoms).

## Action plan

### 1 Establish whether there is a possibility of tolerance or dependence

A complete diagnosis of SUD requires a referral to an authorised prescriber for the appropriate management. However, you will be able to establish if Jane has a possibility of SUD, including features such as tolerance or withdrawal, suggesting dependence.

Opioid withdrawal symptoms include agitation, sweating, musculoskeletal pain, abdominal cramps, diarrhoea, nausea and vomiting and goose flesh. Identifying these symptoms can help you refer the person to an authorised prescriber.<sup>8</sup>

Asking Jane SUD related questions will help you understand how she is using codeine and if there is a possibility of dependency. Some example questions are:

- I noticed you frequently purchase codeine-containing medicines. How often are you using them?
- You mentioned dental pain; do you use codeine-containing medicines for any other reason?
- Do you ever need to take more than two codeine-containing tablets at one time?
- Do you ever use codeine for sleep or anxiety?
- Can you tell me about the symptoms you experience when you stop taking codeine?

<sup>8</sup> [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) (<https://tgldcdp.tg.org.au/etgAccess>) – see 'Psychotropic, Alcohol and other drug problems, Opioids: problem use, Opioid withdrawal'



## 2 Be empathetic

If Jane's answers indicate a possibility of SUD, you will need to talk to her regarding this. People respond best when conversations are framed as protecting them from opioid-related harms and when they recognise you have their best interests in mind. This is often a difficult conversation as most people see themselves as having a pain issue and not a dependence issue. Informing the person that you believe they do suffer from pain can help the conversation.

## 3 Refer Jane to her authorised prescriber

When a person like Jane is dependent on a medicine such as codeine, intervention by an authorised prescriber and long-term treatment is often required. An authorised prescriber is best placed to treat most people with alcohol and drug problems as they have a much better knowledge of the family and local circumstances. Referral by an authorised prescriber to a specialist treatment centre may be necessary if withdrawal is likely to be severe, if management proves challenging or if treatment has been unsuccessful in the past.

### Consider referral if:

- a person presents with a possibility of SUD and they have an extensive history of codeine use.

### Additional resources and support

The [Therapeutic Guidelines](https://tgldcdp.tg.org.au/etgAccess) (eTG Complete) website provides information for health professionals on alcohol and other drug problems – see '*Psychotropic, Alcohol and other drug problems, Opioids: problem use*' – <https://tgldcdp.tg.org.au/etgAccess>

National Drug & Alcohol Research Centre Fact Sheet: *Codeine* – <https://ndarc.med.unsw.edu.au/resource-type/fact-sheets>

This document has been developed by the Nationally Coordinated Codeine Implementation Working Group (NCCIWG). NCCIWG was established to assist with providing consistent communications to inform and educate the public and health professionals about the changes to the availability of codeine-containing medicines in Australia. NCCIWG includes representatives from state and territory health departments and peak professional bodies representing consumers and health professionals.

For more resources and further information about codeine search for **TGA Codeine Information Hub** or go to [www.tga.gov.au/codeine-info-hub](http://www.tga.gov.au/codeine-info-hub)