Pain and pain management – adults

Summary

- Management strategies for pain include pain-relieving medications, physical therapies and complementary therapies (such as acupuncture and massage).
- Studies suggest that a person's quality of life is influenced by their outlook and by the way they cope emotionally with pain.
- Seek advice on new coping strategies and skills. A psychologist or occupational therapist can help you cope with pain.

Pain is a very common condition. The occurrence of pain rises as people get older, and women are more likely to experience pain than men.

There are two main types of pain.
- acute pain – a normal response to an injury. It starts suddenly and is usually short-lived
- chronic pain – continues beyond the time expected for healing. It generally lasts for longer than three months.

Pain may be anything from a dull ache to a sharp stab and can range from mild to extreme. You may feel pain in one part of your body or it may be widespread.

Studies suggest that a person's emotional wellbeing can impact the experience of pain. Understanding the cause and learning effective ways to cope with your pain can improve your quality of life.

Key pain management strategies include:
- pain-relieving medicines
- physical therapies (such as heat or cold packs, massage, hydrotherapy and exercise)
- psychological therapies (such as cognitive behavioural therapy, relaxation techniques and meditation)
- mind and body techniques (such as acupuncture)
- occupational therapy
- community support groups.

Causes of pain

The most common causes of pain in adults include:
- injury
- medical conditions (such as cancer, arthritis and back problems)
- surgery.

The most commonly reported types of pain are headache and back pain (although pain involving the limbs, shoulder and neck is also common).

How pain affects the body

Pain is a complex protective mechanism. It is an essential part of evolution that protects the body from danger and harm.

The body has pain receptors that are attached to two main types of nerves that detect danger. One nerve type relays messages quickly, causing a sharp, sudden pain. The other relays messages slowly, causing a dull, throbbing pain.

Some areas of the body have more pain receptors than others. For example, the skin has lots of receptors so it is
easy to tell the exact location and type of pain. There are far fewer receptors in the gut, so it is harder to pinpoint
the precise location of a stomach ache.

If pain receptors in the skin are activated by touching something dangerous (for example something hot or sharp),
these nerves send alerts to the spinal cord and then to part of the brain called the thalamus.

Sometimes the spinal cord sends an immediate signal back to the muscles to make them contract. This moves the
affected body part away from the source of danger or harm.

This is a reflex reaction that prevents further damage occurring. It happens before you feel pain.

Once the ‘alert!’ message reaches the thalamus, it sorts the information the nerves have sent, taking into account
your previous experience, beliefs, expectations, culture and social norms. This explains why people have very
different responses to pain.

The thalamus then sends the information on to other parts of the brain that are linked to physical response, thought
and emotion. This is when you may feel the sensation of pain, think ‘That hurt! What was it?’, and feel annoyed.

The thalamus also contributes to mood and arousal, which helps to explain why your interpretation of pain partly
depends on your state of mind.

Managing pain without medicines

Many non-medicine treatments are available to help you manage your pain. A combination of treatments and
therapies is often more effective than just one.

Some non-medicine options include:

- **heat or cold** – use ice packs immediately after an injury to reduce swelling. Heat packs are better for relieving
  chronic muscle or joint injuries
- **physical therapies** – such as walking, stretching, strengthening or aerobic exercises may help reduce pain,
  keep you mobile and improve your mood. You may need to increase your exercise very slowly to avoid over-
  doing it
- **massage** – this is better suited to soft tissue injuries and should be avoided if the pain is in the joints. There is
  some evidence that suggests massage may help manage pain, but it is not recommended as a long-term
  therapy
- **relaxation and stress management techniques** – including meditation and yoga
- **cognitive behaviour therapy (CBT)** – this form of therapy can help you learn to change how you think and,
  in turn, how you feel and behave about pain. This is a valuable strategy for learning to self-manage chronic
  pain
- **acupuncture** – a component of traditional Chinese medicine. Acupuncture involves inserting thin needles into
  specific points on the skin. It aims to restore balance within the body and encourage it to heal by releasing
  natural pain-relieving compounds (endorphins). Some people find that acupuncture reduces the severity of
  their pain and enables them to maintain function. Scientific evidence for the effectiveness of acupuncture in
  managing pain is inconclusive
- **transcutaneous electrical nerve stimulation (TENS) therapy** – minute electrical currents pass through the skin
  via electrodes, prompting a pain-relieving response from the body. There is not enough published evidence to
  support the use of TENS for the treatment of some chronic pain conditions. However, some people with
  chronic pain that are unresponsive to other treatments may experience a benefit.

Your doctor or other healthcare professional can guide you through the best treatments for you.

Pain medicines

Many people will use a pain medicine (analgesic) at some time in their lives.

The main types of pain medicines are:

- **paracetamol** – often recommended as the first medicine to relieve short-term pain
- **aspirin** – for short-term relief of fever and mild-to-moderate pain (such as period pain or headache)
- **non-steroidal anti-inflammatory drugs (NSAIDs)**, such as ibuprofen – these medicines relieve pain and reduce
  inflammation (redness and swelling)

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• opioid medications, such as codeine, morphine and oxycodone – these medicines are reserved for severe or cancer pain
• local anaesthetics
• some antidepressants
• some anti-epileptic medicines.

How pain medicines work

Pain medicines work in various ways. Aspirin and other NSAIDs are pain medicines that help to reduce inflammation and fever. They do this by stopping chemicals called prostaglandins. Prostaglandins cause inflammation, swelling and make nerve endings sensitive, which can lead to pain.

Prostaglandins also help protect the stomach from stomach acid, which is why these medicines can cause irritation and bleeding in some people.

Opioid medicines work in a different way. They change pain messages in the brain, which is why these medicines can be addictive.

Choosing the right pain medicine

The right choice of medicine for you will depend on:
• the location, intensity, duration and type of pain
• any activities that ease the pain or make it worse
• the impact your pain has on your lifestyle, such as how it affects your appetite or quality of sleep
• your other medical conditions
• other medicines you take.

Discuss these with your doctor or other health professional, so that you choose the safest and most effective pain relief option.

Managing your medicines effectively

Always follow instructions for taking your medications safely and effectively. By doing so:
• your pain is more likely to be well managed
• you are less likely to need larger doses of medication
• you can reduce your risk of side effects.

Medications for chronic pain are best taken regularly. Talk to your doctor or pharmacist if your medicines are not working or are causing problems, such as side effects. These are more likely to occur if you are taking pain medicines for a long time.

It is important to use a variety of strategies to help reduce pain. Do not rely on medicines alone. People can lower the levels of pain they feel by:
• staying active
• pacing their daily activity so as to avoid pain flares (this involves finding the balance between under- and overdoing it)
• avoiding pain triggers
• using coping strategies.

Side effects of pain medicines

Some of the side effects of common pain medicines include:
• paracetamol – side effects are rare when taken at the recommended dose and for a short time. Paracetamol can cause skin rash and liver damage if used in large doses for a long time
• aspirin – the most common side effects are nausea, vomiting indigestion and stomach ulcer. Some people may experience more serious side effects such as an asthma attack, tinnitus (ringing in the ears), kidney damage and bleeding
• non-steroidal anti-inflammatory drugs (NSAIDs) – can cause headache, nausea, stomach upset, heartburn, skin rash, tiredness, dizziness, ringing in the ears and raised blood pressure. They can also make heart

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failure or kidney failure worse, and increase the risk of heart attack, angina, stroke and bleeding. NSAIDs should always be used cautiously and for the shortest time possible.

- opioid pain medicines such as morphine, oxycodone and codeine – commonly cause drowsiness, confusion, falls, nausea, vomiting and constipation. They can also reduce physical coordination and balance. Importantly, these medicines can lead to dependence and slow down breathing, resulting in accidental fatal overdose.

You can find a more complete list of side effects in a Consumer Medicine Information leaflet. Talk to your doctor or pharmacist before taking any pain medicine to ensure it is safe for you.

**Precautions when taking pain medicines**

Treat over-the-counter pain medicines with caution, just like any other medication. It’s always good to discuss any medication with your doctor or pharmacist.

**General suggestions include:**

- Don’t self-medicate with pain medicines during pregnancy – some can reach the fetus through the placenta and potentially cause harm.
- Take care if you are elderly or caring for an older person. Older people have an increased risk of side effects. For example, taking aspirin regularly for chronic pain (such as arthritis) can cause a dangerous bleeding stomach ulcer.
- When buying over-the-counter pain medicines, speak with a pharmacist about any prescription and complementary medicines you are taking so they can help you choose a pain medicine that is safe for you.
- Don’t take more than one over-the-counter medicine at a time without consulting your doctor or pharmacist. It is easier than you think to unintentionally take an overdose. For example, many ‘cold and flu’ medicines contain paracetamol, so it is important not to take any other paracetamol-containing medicine at the same time.
- See your doctor or healthcare professional for proper treatment for sport injuries. Don’t use pain medicines to ‘tough it out’.
- Consult your doctor or pharmacist before using any over-the-counter medicine if you have a chronic (ongoing) physical condition, such as heart disease or diabetes.

**Managing pain that cannot be easily relieved**

Sometimes pain will persist and cannot be easily relieved. It’s natural to feel worried, sad or fearful when you are in pain. Here are some suggestions for how to handle persistent pain:

- Focus on improving your day-to-day function, rather than completely stopping the pain.
- Accept that your pain may not go away and that flare-ups may occur. Talk yourself through these times.
- Find out as much as you can about your condition so that you don’t fret or worry unnecessarily about the pain.
- Enlist the support of family and friends. Let them know what support you need; find ways to stay in touch.
- Take steps to prevent or ease depression by any means that work for you, including talking to friends or professionals.
- Don’t increase your pain medicines without talking to your doctor or pharmacist first. Increasing your dose may not help your pain and might cause you harm.
- Improve your physical fitness, eat healthy foods and make sure you get all the rest you need.
- Try not to allow the pain to stop you living your life the way you want to. Try gently reintroducing activities that you used to enjoy. You may need to cut back on some activities if pain flare-ups occur, but increase slowly again as you did before.
- Concentrate on finding fun and rewarding activities that don’t make your pain worse.
- Seek advice on new coping strategies and skills from a healthcare professional such as an occupational therapist or psychologist.

**Where to get help**

- Your GP (doctor)