



## Low back pain - patient information

### What is low back pain?

Back pain is common between the ages of 20-55 years. Low back pain is a symptom and location of pain and is not a disease. It may be categorised into two types:

- acute**
  - occurs suddenly
  - lasts for less than 3 months
  
- chronic/persistent**
  - develops gradually over time
  - lasts for more than 3 months
  - causes long term problems

Some people with low back pain will experience mild pain but they may also experience occasional bouts of pain that is more severe. This can make it difficult to determine if their back pain is acute or chronic.

### What causes low back pain?

Around 80% of people experience low back pain at some point in their lifetime but not all will seek treatment. If a doctor suspects that back pain may be related to a serious medical condition then tests will be arranged however most of the time no investigations are required as it is not usually necessary to identify the cause of the back pain as treatment usually remains the same regardless of where the pain is coming from (ie ligaments, muscles, joints or nerves). In addition, changes occur in the spine with age and while these can be seen on x-ray/scans these changes are normal and may or may not be related to pain.

Back pain that is accompanied by pain in the leg, below the knee and into the ankle and foot may be due to a herniated disc (the disc may bulge out of the spinal column). As a consequence, a nerve in the spine may be pinched between the bone and the disc. This is often referred to as 'sciatica' and usually gets better on its own but occasionally an operation may be required.

Some disorders of the internal organs can cause back pain including gall stones, kidney disease or endometriosis.

## **Symptoms of low back pain**

- pain in the lumbosacral area (lower part of the back)
- low back pain may be accompanied by pain in the buttocks or in the leg
- pain may radiate down the front, side or back of the leg or it may be confined to the lower back
- pain may become worse with activity
- pain may be worse at night or after prolonged sitting (eg long car journey)
- less than 5% of low back pain is associated with pressure on a nerve
- less than 1% of low back pain is due to a serious illness such as cancer or inflammatory arthritis (ankylosing spondylitis)

## **Diagnosis of low back pain**

A doctor or physiotherapist will take a medical history and carry out a physical examination to rule out the likelihood of serious disease. Xrays or scans are sometimes ordered but there is often not a specific cause for lower back pain that can be found even after such tests.

## **Treatment**

Most cases of back pain will improve and get better on their own and can be treated with self help techniques.

- over-the-counter pain medication (analgesia)

Paracetamol is usually recommended to treat acute lower back pain. If this is not effective then a non-steroidal anti-inflammatory drug (NSAID) such as Ibuprofen can be used. NSAIDs are not suitable for everyone and are not recommended for long term use without medical supervision.

- stronger pain medication

If back pain is severe an opioid based pain medication such as Panadeine Forte may be prescribed by a doctor. This may be taken in conjunction with a NSAID.

- exercise

It is very important to remain as active as possible. While bed rest may provide temporary relief from your symptoms, resting in bed can lead to stiffness, weakening of the muscles and a slowed recovery period. Recommended exercises for back pain include walking and gentle stretching.

- physiotherapy

A doctor may refer a person with acute back pain to a physiotherapist who can recommend exercises to increase the strength and flexibility of the spine.

## Chronic back pain

Treatment for chronic back pain usually includes a combination of medical and self help treatment. Medical evidence indicates that surgery is not an effective or permanent treatment for most chronic low back pain and can make the pain worse. Surgery may be an option to treat persistent back pain when there is an identifiable cause (such as a ruptured hernia), the symptoms are becoming progressively worse or the symptoms have not responded to any other treatment. As with any surgery, spinal surgery carries some risk and a surgeon should discuss the risks and benefits of an operation before proceeding.

- pain medication (analgesia)

Pain medication is usually the first treatment for persistent back pain. Paracetamol will be recommended initially. If back pain is severe a compound analgesia such as Panadeine or Panadeine Forte may be prescribed.

Non-steroidal anti-inflammatory drugs (NSAIDs) such as Ibuprofen should only be used long term under the supervision of a doctor. If NSAIDs are deemed an appropriate treatment for persistent back pain then medication may be prescribed to protect the gastrointestinal system from the potential long term effects (ie stomach or gastrointestinal bleeding and ulcers) of NSAIDs.

- Amitriptyline

If back pain continues to be severe and does not improve with use of pain medication then a medication called Amitriptyline may be trialled. This drug belongs to a class of drugs known as tricyclic antidepressants and is usually used to treat depression. It has also been found to be useful in the treatment of nerve pain. Side effects of Amitriptyline include dry mouth and drowsiness.

- exercise

People with chronic back pain are advised to remain as physically active as possible as research has shown that this will reduce the severity of symptoms as does continuing to work or returning to work as soon as possible.

- physiotherapy

A physiotherapist is a qualified specialist who can teach exercises that strengthen the muscles supporting the back as well as improve the flexibility of the spine. They are also able to offer advice on improving posture and preventing further strain on the spine.

- Transcutaneous Electrical Stimulation (TENS)

People with chronic back pain may be advised to trial TENS. This involves a small machine that can be attached to a belt or waistband connected to small electrodes that attach to the skin via sticky pads over the area of pain. The machine delivers small electrical impulses when turned on. This is thought to help pain in two ways: a low electrical pulse encourages the body to produce more endorphins (the body's own pain relieving chemical) and a high electric pulse can block pain messages, preventing them from reaching the brain. A TENS machine should only be used under the supervision of a doctor, physiotherapist or pain clinic.

- pain management program

Evidence shows that people with long term back pain may benefit from rehabilitation known as a pain management program. This treatment is not a cure for pain but uses a combination of group therapy, exercises, relaxation and education about pain and the psychology of pain. People are taught how to increase their activities and pace themselves. At the end of the program people often find that they are able to manage their pain better and have a better quality of life.

- non-surgical treatments

Injections of local anaesthetic and steroid (used to reduce inflammation) which target areas of the spine that may contribute to the pain may be offered. These treatments are not suitable for everyone with persistent pain.

- general health

It is recommended that people with persistent or recurrent back pain take general health measures to reduce the likelihood or frequency of episodes of back pain:

- keep body weight within normal range (lose excess weight if necessary)
- stop smoking
- regular exercise/keep fit and be physically active - join a gym or start swimming