



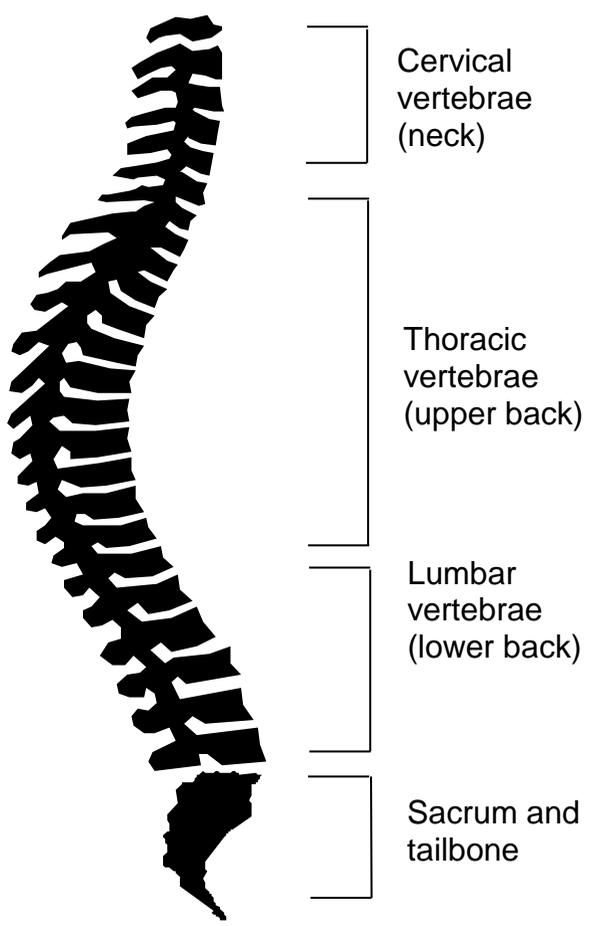
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# ***Coping with spinal fractures and back pain***

***Information for  
patients and carers***

**Grampian Osteoporosis  
and Rheumatology Service  
Ashgrove House, Aberdeen Royal Infirmary**



Cervical  
vertebrae  
(neck)

Thoracic  
vertebrae  
(upper back)

Lumbar  
vertebrae  
(lower back)

Sacrum and  
tailbone

**A diagram of the spine**

## ***What is this leaflet for?***

This leaflet explains how spinal fractures can happen and what you can do to manage your symptoms. We hope you find it useful.

## ***What is a spinal fracture?***

Spinal fractures, also known as vertebral or compression fractures, are one of the most common types of broken bone in osteoporosis. You may not always be aware that a spinal fracture has occurred as they don't always cause the pain you would expect.

## ***How do spinal fractures happen?***

These fractures can occur without the trauma of a fall and may occur after daily activities such as bending, lifting or as a result of an awkward twisting movement (such as reaching for something high above or by picking up a heavy bag of shopping).

You may not feel any pain, so this is called a "silent fracture", but you may notice that you have lost height.

Spinal fractures are more common than we realise with only about 30% diagnosed.

Sometimes spinal fractures are picked up when an investigation such as X ray, MRI or CT scan is being undertaken possibly for another reason.

## ***Where do spinal fractures caused by osteoporosis occur?***

Osteoporotic spinal fractures occur commonly in the thoracic (middle) and lumbar (lower) vertebrae (see diagram on inside front cover of this leaflet).

## ***What happens after a fracture?***

The acute pain of a fracture may be felt up and down the back and often right through to the front of the chest.

The amount of pain you feel as a result of fracturing vertebrae in your spine doesn't necessarily depend on the number of fractures. You might have intense pain after breaking one vertebra or have several fractures and have only mild discomfort. You may have no pain at all.

Only half of people with osteoporosis complain of back pain after a vertebral fracture.

Spinal fractures take between 6 and 12 weeks to heal. It's important to note that the vertebrae don't return to their normal shape. They heal in a more compressed shape which leads to the change in posture and height.

Osteoporosis doesn't affect the healing process.

## ***How does chronic pain develop?***

Chronic pain is when pain is still present after the fracture has had time to heal. Chronic pain often follows vertebral fractures due to a number of reasons (listed below):

### **General alterations in body shape**

If several vertebrae are fractured/broken (the bone collapses down on itself), the spine then becomes shorter. If wedge fractures occur (one side of the bone collapses) the resulting change in body shape and possible curvature of the spine (kyphosis) means your stomach may stick out. There may also be less room for the lungs to expand in the chest which can cause breathlessness. Changes in your posture and body shape can be upsetting too.

In severe osteoporosis, people with a very curved spine may find it difficult to hold their head up. Trying to do so can lead to neck pains and tension headaches. The small sliding joints in the spine may also be strained by the change in shape of the spine and the back muscles have to work harder resulting in pain.

### **Muscle spasm**

Pain can result from muscle spasm. This can happen as the muscles tense up in response to the pain from the fracture or from the strain on neighbouring muscles and joints. If you are worried about falling or breaking a bone again this can also cause you to tense up and send your muscles into spasm and result in worsening pain.

## **Sleeping problems**

If you're finding it hard to cope with pain, you may find it difficult to sleep. Poor sleep will further reduce your capacity to manage pain and it may lead to you becoming anxious and depressed.

## ***How do I manage my pain?***

Pain is the most common symptom experienced by patients who have suffered a spinal fracture.

It is important to be able to manage it and to cope with the change of body shape and loss of height which might develop as a result of the spinal fracture.

Pain is very individual; no two people are alike. What works for one person may not for another. It's important to acknowledge pain and not ignore it. Responding to pain helps you to take steps to control it.

## **Pain relief**

- If you have chronic pain, seek help to find out about ways of coping with it. Good pain control will help you to relax and give you confidence to get on with life. There's no shame in taking painkillers when you're recovering from a fracture or to help you control your pain.

- Taking painkillers as prescribed doesn't mean you'll get used to them, and doesn't stop them working when you really need them. They are an important part of a pain control programme. It's important to follow the instructions on how many tablets to take and how often. Take them regularly as prescribed when your pain is present or before activity, not just when it becomes severe, as this can help to control levels of pain.
- If you're not managing to control your pain with the above advice, please seek further advice from your GP.

## ***Are there any other ways to deal with the pain?***

### **Exercise and physiotherapy**

Physiotherapy can be very helpful in the early weeks after a fracture. It can help you to get your mobility back and later they can teach you exercises to strengthen your muscles which you can continue at home. If you are worried about falling then some strength and balance exercises can be helpful and improve confidence.

Your GP can refer you to physiotherapy or you can self-refer at:

 [www.mskphysiogrampian.scot.nhs.uk/](http://www.mskphysiogrampian.scot.nhs.uk/)

## **Should I rest more or keep going?**

It's important to get up and about as soon as possible after a fracture. This is because prolonged bed rest leads to a loss of muscle strength and loss of bone as well as other health complications. But it's just as important to carefully pace yourself by getting the balance right between being active and resting.

Many people who have chronic pain as a result of spinal fractures find it helps to take a rest in the middle of the day for 30 to 60 minutes. When resting, it's best to lie down on a bed for more support as this is more restful than sitting in a chair. Make it an enjoyable rest by reading a book or listening to some music. A rest like this often "recharges the batteries", easing your back pain and giving you enough energy to continue for the rest of the day.

## **Hot packs and cold packs**

A simple heat pack can be warmed in the microwave and applied to the painful area for 20 to 30 minutes. If using a hot water bottle please take care. It should always have a suitable cover to protect your skin. Be careful when using heat not to burn your skin.

Only use cold packs for up to 10 minutes. Never place them directly on to your skin and cover the cold pack with a cloth before use.

**Do not use hot and cold packs if you have any skin or circulation problems.**

## **Transcutaneous Electrical Nerve Stimulation (TENS)**

This is a machine that can help to relieve pain. The machines are battery operated and portable, small enough to be clipped to a waistband. They are widely used by physiotherapists and maternity units.

Small pads are placed around the painful area to produce a tingling feeling, which is enough to block the pain messages from reaching the brain.

TENS machines are not expensive and available to buy from chemists and online.

## **Acupuncture, reflexology and aromatherapy**

These are alternative therapies that some people may find helpful. Make sure the therapists are fully qualified and have an understanding of spinal fractures and osteoporosis. This also applies to Chiropractors and Osteopaths.

## **Relaxation**

Relaxation and breathing exercises are useful in controlling pain. It can help you become calmer and more able to cope with your pain. Your local library may have relaxation CDs you could borrow.

## **Beds**

Most people with osteoporosis prefer a firm but not too hard bed. If a bed is too firm it may make a tender spine more painful, while soft beds sometimes give too little support. Therefore choosing the correct bed for your needs may reduce some of the pain. Sometimes soft mattress toppers on a firm mattress can help.

## **Chairs**

Chairs can make the pain worse if they don't provide the correct support. The height of the chair is important. Your feet should be flat on the floor when sitting and the chair should have arms and a supportive back.

## **Kitchen tasks**

Try alternating between sitting and standing while carrying out these activities. Make sure you work with items directly in front of you to avoid twisting movements.

**An Occupational Therapist can help to make life easier in the home. They can advise on equipment and the general layout of your home to make life easier and safer. Your GP can refer you to an Occupational Therapist.**

## ***How do I find out more?***

For further confidential advice on coping with vertebral fractures or any other aspects of osteoporosis please contact:

### **Osteoporosis Specialist Nurse**

**☎: 01224 553353**

**✉: [gram.osn@nhs.scot](mailto:gram.osn@nhs.scot)**

Please leave your name, CHI number (your ID number that's on all your letters from the hospital), contact number and a brief message. We'll respond as soon as we can.

You can find more information about osteoporosis, bone health and living with broken bones from the Royal Osteoporosis Society. They have a range of fact sheets about living with spinal fractures and safe exercises.

**🔗: <https://theros.org.uk/>**

**☎: 0808 800 0035 (Helpline)**

**(Monday to Friday, 9am to 5pm)**

The helpline is manned by staff with specialist knowledge of osteoporosis.

Local support groups provide support by sharing experiences with those who have had similar difficulties. For details of your local support groups, please contact:

**✉: [aberdeenvolunteers@theros.org.uk](mailto:aberdeenvolunteers@theros.org.uk)**

**This leaflet is also available in large print.**

**Other formats and languages can be supplied on request. Please call Quality Development on 01224 554149 for a copy. Ask for leaflet 0746.**

Feedback from the public helped us to develop this leaflet. If you have any comments on how we can improve it, please call 01224 554149 to let us know.

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