Service: Orthopaedic

Spinal fractures
This leaflet has been designed to inform you about your spinal fracture(s).

It is aimed to help explain how your fracture will be treated, guide your recovery and answer some common questions. It should be read alongside the information your consultant gives you.

The spinal fracture service is led by three of our consultant orthopaedic spine surgeons and are supported by our senior spinal nurse practitioners, physiotherapists, orthotists and occupational therapists.

What is a vertebral fracture?

A vertebral fracture is a break to one of the bones in your spine. Your spine runs from the base of your skull to your pelvis. Depending on where along your spine you have fractured and the number of spinal fractures you have, this will affect where the pain is felt and how you are treated.

How did it happen?

Your consultant will have discussed the likely cause of your spinal fracture. Most follow a specific injury and you will remember the day it happened.

Occasionally, a fracture can occur in your back which you may not be able to pinpoint to a specific injury/event. These fractures happen because your bones are weaker than normal, most commonly because of a condition called osteoporosis.

People over 55 are at greater risk of osteoporosis. If you’re over 55 years old we should have given you a “bone health” questionnaire to complete. Your answers are reviewed by our bone health team and they will contact you and your GP
if you are at risk of osteoporosis. There are leaflets on osteoporosis in our waiting room or you can visit: www.nhs.uk/conditions/osteoporosis or contact your GP for more information.

Why is pain shooting up my spine and into my legs?

Your doctor will have shown you the X-ray image of the fractured vertebra(s). What the X-ray doesn’t show are the muscles, ligaments and nerves that also get bruised or injured by the force that led to your vertebra fracturing.

Injured muscles and ligaments can cause “spasm” pains that shoot in all directions.

If the nerves are bruised you may get some temporary pain or numbness felt in your buttock and leg(s). This should have been discussed at your appointment. These symptoms should get better within a few of weeks. If symptoms get worse you must seek medical review.

Are there new symptoms I should be worried about?

Yes. In the majority of people spinal fractures heal without complication. Very occasionally the broken bone fragments can press on the spinal cord or lower spinal nerves and produce leg numbness and pain. These symptoms should improve.

Very occasionally the nerves are more affected and you may notice lower leg weakness. If this happens we need to see you urgently. Sometimes the nerves supplying your bladder and bowel may also be affected causing numb genitals or incontinence. If this happens you must return to the Emergency Department for urgent review.
How will my fractured vertebra be treated?

The vast majority of vertebra fractures will heal without any specific intervention. Your consultant will have discussed the type of fracture you have and the options for treating it. There are three main treatment options:

- **Conservative management.**
- **A spinal brace.**
- **Surgery.**

Conservative treatment

The majority of vertebral fractures are treated conservatively. This means allowing the bone to heal naturally and therefore without a specific brace or the need for surgery.

This does not mean recovery is simple and easy. Vertebral fractures are painful.

You may have broken another bone in the past. It may have been splinted by a strap or plaster cast when it heals. The splinting keeps the fracture still and supported which helps the pain. We can’t easily do this for vertebral fractures.

Additionally, if you fractured your wrist, we would not ask you to walk on your hands! Unfortunately, standing and sitting puts a weight and some movement across the fractured vertebra, which is painful. We have to accept this pain from the vertebral fracture during the healing period. This healing process often takes three to four months but the majority of the pain settles by six to eight weeks.

Regular pain killers are suggested. Paracetamol and Ibuprofen (if tolerated) are good painkillers. Codeine or Tramadol can be added if additional pain is felt. If regular muscle spasms are a
problem low dose Diazepam can be helpful for a short period. It’s best to discuss pain killer options with your consultant, GP or pharmacist.

Pain killers can cause constipation. A healthy, well balanced diet can help reduce the risk of constipation. If you become constipated whilst at home your pharmacist or GP can advise you on laxatives. For more information about constipation please visit NHS Choices website: [www.nhs.uk/conditions/constipation/](http://www.nhs.uk/conditions/constipation/)

We encourage regular activity such as walking. You will mostly be guided by your symptoms. People often find sitting or standing for long periods difficult. Regularly changing position and moving about shares the load/weight across your vertebral fracture thereby easing the pain slightly. Usually by four weeks the pain is noticeably a bit better.

**Spinal brace**

Some fractures may be helped by a supportive brace. Your consultant will have discussed this option with you. There are several different types of spinal brace, below are three braces commonly used by North Bristol NHS Trust:

- **Cervical Thoracic Lumbar Sacral Orthosis (CTLSO).**
- **Thoracic Lumbar Sacral Orthosis (TLSO).**
- **Lumbar Sacral Othosis (LSO).**

Whether you will benefit from wearing a brace will be discussed with your spinal surgeon.
Fitting a brace

A member of the spinal team will show you how to fit the brace. This may be an orthotist, physiotherapist or spinal nurse. We will ensure you are able to manage your brace before you leave hospital. If you are unable to do this independently the therapy team can teach family/friends or liaise with community services for support.

Brace related problems

It is known that spinal braces can cause pressure ulcers. Wearing the brace increases your local temperature and may cause excessive perspiration in and around the area. Constant moisture can cause skin breakdown. A spinal brace also applies some pressure to your skin which increases risk of skin problems.

We recommend wearing a cotton t-shirt or vest underneath the brace to help protect skin. In the vast majority of cases braces do not cause any problems but it is important to check your skin daily for possible skin pressure effects (pressure ulcers).

Early symptoms of pressure ulcers include skin discolouration, redness and/or pain. If left, these symptoms can develop into a blister or open wound. If redness persists despite padding, or you think you may have a pressure ulcer, please seek medical advice from your GP or hospital. More information on pressure ulcers can be found on the NHS Choices website: www.nhs.uk/conditions/pressure-sores/

How long do I wear the brace?

How long you need the brace is guided by your consultant and they will discuss this with you at your appointment.
Most people are advised to wear the brace when mobilising and do not need to wear it at night or when sat comfortably. Some patients may prefer to wear the brace when sitting upright as it can help with pain. There are occasions when your consultant will want to keep the brace on throughout the day. This will be discussed on an individual basis.

**Surgery**

Occasionally an operation is suggested to treat your vertebral fracture. The operation will have been discussed by your consultant.

After surgery, apart from keeping a check on the wound, your recovery will mirror the conservative group.
Post op wound care

The spinal nurses will redress your wound prior to discharge and advise you on subsequent dressing changes. You are advised to keep the dressing completely dry for 12-14 days following surgery.

You will be discharged with extra dressings to put on top of your current dressing if needed, to ensure the dressing remains intact. This will help to reduce the risk of infection.

Your spinal nurse will discuss wound care with you on an individual basis depending on the type of surgery/wound closure. Your wound site needs to be clean and healthy with minimal oozing prior to your discharge.

The spinal team holds a dressing clinic though the week where wounds can be inspected and subsequent treatment advocated. Alternatively you can see your practice nurse at your local GP’s.

If you have any concerns regarding your wound once discharged from hospital you can call spinal nurses on 0117 414 1730.

Rehabilitation

On the first day following your surgery, the physiotherapist will come and assess you. They will give you some exercises and show you the correct way to move in bed.

If appropriate they will also help you to get out of bed and increase your walking distance over the next few days.

They will practice stairs with you if required.

You will not be referred for any spinal mobilisation exercises for three months, but your needs will be assessed on an individual
basis and you will be referred for outpatient physiotherapy if strengthening and mobility progression is required.

Things to look out for once discharged from hospital

Severe redness around your wound or discharge from your wound. A high temperature/feeling unwell. These could indicate that you have an infection. Please inform the spinal nurse practitioner via the spinal helpline or visit your local emergency department.

General advice following spinal fractures

Following a spinal fracture there are certain measures you can adopt that may protect your spine and reduce the pain felt during the healing process.

Lifting: No lifting of heavy objects. How “heavy” is “heavy” varies not only from person to person, but also the way in which you lift and hold the object.

Advice on safe lifting tips can be found at: www.nhs.uk/live-well/healthy-body/safe-lifting-tips
A sensible approach needs to be adopted for the first eight to twelve weeks after spinal fracture.

Twisting: Do not twist your back for up to three months. If you need to reach an object that is behind you make sure you turn your feet and do not twist your spine.

Bending: No deep bending or stooping. When brushing your teeth at the sink keep a good posture, do not stoop. When getting dressed and putting your shoes on bring your knees towards your chest rather than bending down to the floor. Do not bend to reach for objects.
When can I return to work?

There is no set time to be off work. Overall time off work will depend on the work you do, the demands of your job and the symptoms you’re getting.

People with office based work are typically off for four to six weeks. Those will manual occupations can be off for three to four months. You should discuss return to work options with your consultant, GP and employer.

When can I drive?

You must tell the DVLA if you have had an injury to your spine. You are typically asked to complete the DVLA G1 form: www.gov.uk/spinal-problems-driving

Your consultant will have advised on return to driving. Driving involves a complex and rapidly repeating cycle that requires a level of skill and the ability to interact simultaneously with both the vehicle and the external environment. You must confidently be able to do this to drive. You must also be able to safely perform an emergency stop. Given everyone’s recovery will be at a different rate; the time to return to drive will also vary. You may choose to re-discuss this with your consultant or GP. Information is available of the DVLA website: www.gov.uk/driving-medical-conditions

Do I need physiotherapy and occupational therapy?

If you were admitted to hospital following the spinal fracture you will be assessed by the physiotherapist and occupational therapist before going home. They will look at your mobility, transfers and how you will manage at home with everyday tasks following your fracture.
Most people do not need routine physiotherapy following a spinal fracture. Once the fracture heals, your pain will improve and you will be able to return to normal activity. With time, the residual muscular pain will also fully improve. If problems persist we will typically choose to see you again before considering a referral to physiotherapy.

**Do I need to see my spinal consultant again to check progress?**

All patients are reviewed in the out-patient clinics. Routine follow-up of patients with spinal fractures at North Bristol NHS trust is no longer performed. Yearly reviews of our patients have shown the vast majority of patients improve and few benefit from regular follow-up review.

We mostly provide patients an “Open appointment” outcome. This does not mean you have been discharged from our service but allows you to re-book an appointment to see one of the consultants if your recovery has not progressed as explained at your consultation or depicted in this leaflet.

The open access spinal fracture clinic appointment lasts for six months. If six months has lapsed since last review we ask you see your GP first to discuss the problem.

Patients who have undergone surgery are usually kept under review for 12 months.

**What happens if my fracture does not heal?**

Most spinal fractures heal within three to four months. If pain persists beyond this expected recovery period you will be reviewed by your consultant and further options discussed on an individual bases.
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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