

If you require this document in Braille, large print or another language, please call the Patient Advise and Liaison Service (PALS) on 0800 073 0578

Do you want to comment or know more about Therapy Services?

Please contact a member of our team:

Orthopaedic Therapy Team: 0151 290 4352

Therapist.....

Whiston Hospital
Warrington Road,
Prescot, Merseyside, L35 5DR
Telephone: 0151 426 1600

St Helens Hospital
Marshall Cross Road,
St Helens, Merseyside, WA9 3DA
Telephone: 01744 26633

 /sthknhs  @sthk.nhs

www.sthk.nhs.uk

Spinal Fractures: Thoracic/Lumbar

This leaflet can be made available
in alternative languages / formats on request.

如有需要，本传单可提供其他语言/版式
此單張的其他語言/格式版本可按要求提供

Na żądanie ta ulotka może zostać udostępniona
w innych językach/formatach.

Author: Physiotherapist
Department: Trauma & Orthopaedics
Document Number: STHK1621
Version: 001
Review Date: 01 / 02 / 2024

What is a thoracic/lumbar spinal fracture?

A spinal fracture is a break to one of the vertebrae, the bones in your spine. Depending on where the fracture is in your spine will affect where your pain is felt and how your fracture is treated.

Your consultant will have explained the cause of your fracture.

Most are caused by a specific injury and you will be aware of how this happened.

Sometimes spinal fractures are caused because your bones may be weaker than normal, this may be due to a condition called Osteoporosis. The ward doctor will discuss this with you.

How will this be managed?

Most stable fractures are treated conservatively (without an operation). Sometimes you will need to wear a brace to support your spine while it heals. Occasionally, surgery may be required.

What is a spinal brace?

A spinal brace is a device designed to limit movement of the spine and they are commonly used to manage spinal fractures.

By limiting the movement of the spine in this way, this helps the healing process.

It may also help to prevent further injury or damage and can help to minimise pain and discomfort. The need to wear a brace will be determined by the multi-disciplinary team.

Notes

The type of brace needed will be determined by the fracture.

The ones most commonly used here are:

- Cervical Thoracic Lumbar Sacral Orthosis (CTL SO)
- Thoracic Lumbar Sacral Orthosis (TLSO)
- Lumbar Sacral Orthosis (LSO)

When to wear the brace?

The type of fracture that you have sustained will determine when the brace should be worn. This will be discussed on an individual basis.

When a brace is required for pain management only, this can be fitted whilst sitting. Otherwise this must be completed whilst lying flat. Most braces are to be worn at all times unless lying flat on the bed.

Fitting of the brace is typically completed via a type of log rolling technique with assistance of 1 or 2 people, depending on your capabilities and the type of fracture.

How long will I need it for?

The reason why you require the brace will determine the length of time you require it for. This is typically 12 weeks.

It is important that you keep wearing your brace until your consultant has advised otherwise.

Fitting the brace

You will be measured for the brace by an experienced therapist on the ward. Occasionally, this may need to be specifically ordered in and so can take longer for this to be fitted. The brace will then be fitted by an Orthotist who will visit the ward. Alternatively, an experienced therapist may complete the initial fit.

You will be shown how the brace should be fitted at this stage. In some cases, a family member or carer may need to be shown how to assist you with your brace - this can be arranged by the ward therapist. You will be provided with written instructions about your particular spinal brace.

Pain Management

The Orthopaedic team will work with you to ensure that your pain is controlled as effectively as possible. You will be sent home with the appropriate medications, but if you require more or further advice you should talk to your GP.

Early Exercises

Whilst you are waiting for the brace to be fitted, it is likely that you will need to remain on bed rest. During this time you will be taught how to log roll (turn from side to side) whilst keeping your back straight - this will help protect your back and allow you to move in bed more comfortably.

It is important to reduce the risk of developing a chest infection or blood clot (DVT or PE) and to limit how much your muscles may weaken.

The following exercises will help reduce this risk:

Driving

Your consultant will inform you when you can consider resuming driving, once your brace is no longer needed. You should inform the DVLA and your insurance company about your injury.

You must feel comfortable and confident to drive and ensure you are able to perform an emergency stop. It is advisable only to drive short distances initially.

Working

You are likely to need some time off work initially. Check with your consultant and employer before you return to work. You may need to modify your activities at work for a while when you return, especially if your job is active or involves a lot of driving. Please ask for a fit note, if you require one, before you go home.

Follow-up

You will receive a follow-up appointment at either St. Helens and Knowsley NHS Trust or The Walton Centre. It is important that you continue to wear your brace until advised otherwise.

Most people do not need routine follow-up Physiotherapy. If this is required, this will be identified by the ward or at your follow-up appointment.

Following your discharge from the ward, should you have any issues with the brace, please contact the Orthotics Department on 01744 646422.

Sleeping

Try to sleep on your back if possible. You may take the brace off in bed but if you normally get up to use the toilet at night we recommend that you sleep with the brace on.

To get on and off the bed use the "log rolling" method you were shown on the ward. This method protects your back from twisting.

Mobility

Providing you are not in pain, walking can be a good form of general exercise to help after your injury. Try to gently build up the amount of walking gradually. It is important to regularly change your position and moving around will also help with any pain.

Normal day to day activity is acceptable, but refrain from physical activity such as sport or gym work.

Avoid

- **Lifting** - no lifting of any heavy objects
- **Twisting** - do not twist your back. Make sure any item you need is within easy reach or ask someone else to do this for you
- **Bending** - avoid bending or stooping. Maintain a good posture at all times as able. If you are unable to wash and dress then the ward therapist will assess for any equipment needed to assist you

To assist good circulation:

Move both ankles and toes up and down as much as possible for 30 seconds



To maintain muscle strength:

Pull your toes towards you and push the back of your knees into the bed. Hold for 5-10 seconds

Repeat 5-10 times/day



To keep your chest clear:

Take 3 deep breaths in and hold for 2-3 seconds before exhaling. Follow this with a huff, which is a short, sharp breath out with the mouth wide open and then a cough. Repeat this every hour.

Mobilising

Once you are allowed to get out of bed (usually once the brace has been fitted), the therapy team will assess your mobility and determine any equipment you may need for discharge. It is normal to feel dizzy and weak when you first get up, this will reduce the more mobile that you become.

Depending upon your ability to mobilise, the therapists on the ward may provide you with a walking aid. They will also assess your ability to complete the stairs for home if needed.

Pressure Care

Wearing a spinal brace can make the skin under the brace become hot and cause excessive sweating. This moisture can lead to skin breakdown. Pressure from the brace itself can also cause skin problems. We recommend:

- check the skin daily when washing/dressing
- wear a thin, close fitting cotton top or vest under the brace to help protect the skin
- ensure the skin is dried thoroughly before replacing the brace
- be vigilant for skin discolouration, redness and/or pain indicators of pressure that could lead to an ulcer

If you experience any of these symptoms, then seek medical advice from the GP or the Orthotics Department at St Helens Hospital.

What important symptoms do I need to be aware of?

Mild to moderate pain is expected. Should you experience severe pain which is not relieved by painkillers then you should contact your GP or the hospital for further advice.

Pain and numbness can occur after your injury. If you experience any **change** in the power to your legs, reduction in the sensation to your legs, genital or anal area, problems with your bladder or bowel function you should attend your nearest A&E for further assessment.

Discharge Planning

This starts early on following your admission to hospital. The team of health professionals involved in your care will discuss your discharge with you.

Please note, local care agencies are usually unable to provide support for brace care once you have returned home. We encourage you to speak with family and friends to identify any concerns that you may have and determine what support they may be able to offer you once at home.

Washing & Dressing

In most cases, you will need assistance to complete this whilst lying flat on the bed. Once the brace has been fitted, you can complete this task sat upright.

If you have been told you can fit the brace while you are sitting, we recommend having a strip wash. Long handled aids may be needed to help you achieve this.

You must not attempt to use the shower or bath in any way at this stage.

Sitting

Try to sit in a supportive upright chair and maintain good posture. Avoid soft chairs and if needed place a cushion in your lower back for comfort. Avoid sitting for prolonged periods.