

## Patient information and discharge advice for **Thoracic and Lumbar spine** fractures (adults)





Major Trauma Serrvices

#### Aintree Site

Lower Lane, L9 7AL Tel: 0151-525-5980

#### **Royal Site**

Prescot Street, L7 8XP

### **Broadgreen Site**

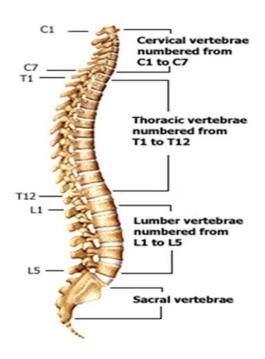
Thomas Drive, L14 3LB

Royal & Broadgreen Tel: 0151-706-2000

This leaflet has been designed to help give you information about your condition. It is an overview for patients who have sustained a fracture (break) to the bones in the thoracic spine (middle of the back area) and lumbar spine (lower back area). This is a general guide and individual requirements may vary.

## The Spinal column

The spinal column is made up of bones that are all stacked up on top of each other, with soft cushions of discs in between each of the bones that act as shock absorbers. The bones get larger as you go down the spine with the bones at the lower back being the largest to help support the weight of the body. The bones each form a circle, which encases the spinal cord and nerves and provides protection for these.



(Diagram showing a side view of the spine)

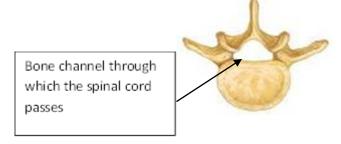
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The nerves in the thoracic area are responsible for the feeling in your trunk area and the spinal cord which runs through the thoracic area carries messages to your legs and trunk area from your brain and back again. The spinal cord acts in a similar way to the internet highway passing information back and forwards from the brain to the body and back again. This is how your limbs move and you feel sensation and your internal organs work.

The spinal cord finishes at the level of lumbar vertebrae 1 and beyond this there is a big bundle of nerve fibres, known as the cauda equina nerve roots. The nerves in the lumbar area are responsible for the feeling and movement below your waist, in your legs and your bladder, bowel and sexual function.



(Diagram looking at the spinal bones from above)

## **Fractures**

A fracture (break to the bone) can occur for several reasons but usually as a result of some force to the body, for example in a Road traffic accident, fall, sport injury etc.

There are 2 categories of fractures that can occur: - Stable or Unstable.

## Stable fractures

These are fractures where the bone has been broken/damaged but because of the way this has happened the majority of the structure is still intact and therefore it is highly unlikely to move with the normal body.

These fractures are usually managed conservatively (without an operation) and sometimes require you to wear a brace to help support the structure whilst the bones heal, in the same way you would need to wear a plaster cast for a broken arm of leg.

You will be monitored with x rays or scans at regular intervals; usually you will be sent appointments to be seen in the outpatient clinic.

If you need to wear a brace then this will be fitted and explained to you before you are discharged home and you will need to continue to wear the brace as you have been instructed and until you are seen in clinic and instructed that it is safe to discontinue wearing it.

## **Unstable fractures**

In an unstable fracture the damage to the bones means that the bone has moved and/or it has the potential to move further and cause problems with the nerves or spinal cord if it is not stabilised.

Usually unstable fractures need an operation to fix the bones in position and stop the movement. Instrumentation in the form of screws and rods are usually inserted to act as scaffolding to support the bones whilst they heal. These are usually left in place and not removed even once the fracture has healed.

Surgery can be performed from the front of your abdomen (tummy area), the side of your abdomen or from the back and a decision will be made based upon your specific fracture. If an operation is needed then this will all be explained to you by your medical team and you will have the opportunity to ask questions.

## **Neurological problems**

When you have sustained your injury this may have caused some damage to the spinal cord and/ or spinal nerves in the spine this can be because of pieces of bone causing pressure to the nerves, the way your injury occurred because of the force, or swelling as a result of the trauma to the spine.

This may have caused you some problems with the movement or feeling in your body. Injuries in the thoracic area, resulting in spinal cord or spinal nerve damage can cause problems in the trunk and the lower limbs, injuries in the lumbar area can cause problems with the lower limbs.

This can result in weakness of your limbs, changes to how your body feels, difficulty with your bladder, bowel and sexual function and the most severe form of spinal cord damage results in paralysis.

Usually this occurs in an unstable fracture which may need an operation to remove anything causing pressure to the nerves, to try and improve any weakness or changes to the feeling in your legs.

Sometimes surgery needs to be delayed slightly to allow any swelling to settle down. Operating whilst there is swelling and irritation to the structure can increase the injury to the nerves that already exists because of the trauma of the accident.

The decision to perform an operation is taken when the risks of any damage to the nerves/spinal cord are balanced against the risk of the swelling and surgery. This is a decision the consultants will explain to you and discuss with you.

Each individual patient has a plan of treatment that is specific to their injury and it will all be discussed with you.

With any kind of fracture it is usual for you to be kept flat and still in bed until your injury has been assessed, all scans and x rays have been done and a plan of care which is individual to you has been made and discussed with you.

## **Discharge**

It is normal to experience some pain and altered sensation (pins and needles, tingling, cramps, muscle spasms and feeling like water is running down your leg or something is crawling on your skin) to your legs as the nerves and structure recover from your injury.

Full nerve root recovery can take 12-18 months to manifest itself, so it can take nerves this long to see what degree of recovery they make.

You will be sent an outpatient appointment to be seen in clinic at The Walton Centre by a consultant or a Spinal nurse specialist. This appointment will be sent in the post to you and it is important that you attend this appointment. What can you do?

- Remain off work/college/university until you are advised by your medical team that you can return
- Although we want you to be mobile, normal day-day activity is acceptable, but we ask that you refrain from physical activity, including sport or gym work until you are advised by your medical team it is safe to do so.
- You can only drive when you can drive the car safely this includes having a full range or movement and being able to perform an emergency stop.

## Pain relief

You will receive pain killers whilst you are in hospital and you will also be prescribed a 10 day supply to take home with you on your discharge. A discharge summary will be sent to your GP practice so for further medication please contact your GP to arrange this.

What should you look out for ?

Although complications are uncommon there are some symptoms that you could experience that mean you should be checked over urgently, to ensure everything is healing well:-

Mild to moderate pain is to be expected because of the force of the trauma you have sustained and any surgery that has been performed. Should you experience severe pain which is not relived by your pain killers then you should phone for advice or return to the hospital.

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 speak to your nurse specialist or attend your local A+E department. If you fall and injure yourself you should attend your local A+E department.

## **Contact Details**

If you have any queries you can contact the following-

If you were on the major trauma ward at Aintree contact:

## **Major Trauma Nurse Co-ordinator**

0151 529 2551

(Please leave your name, date of birth, brief issue and contact number)

## Major Trauma Ward

0151 529 6255

## For brace problems contact

0151 529 2531 (09.00-17.00, Mon-Fri)

If you have been discharged from The Walton Centre –

#### **Spinal Nurses**

0151 529 8853

#### **Caton Ward**

0151 529 5628







# If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation @liverpoolft.nhs.uk

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