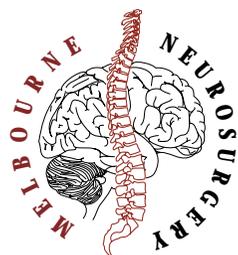


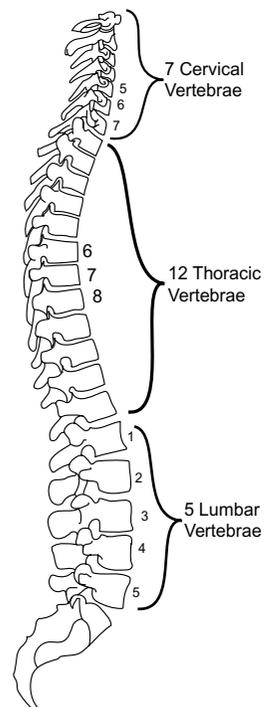
## INFORMATION LEAFLET

# THORACIC DISC PROLAPSE



## THE THORACIC SPINE

The THORACIC spine (the bones and discs of the chest) is made up of vertebrae and discs. The vertebrae are the blocks of bone that make up the spine, discs act as cushions between them. The vertebra has a ring of bone on the back that is made from the lamina and the pedicle. When all the vertebrae are stacked on top of one another these rings line up to form a tube (CANAL). This contains the spinal cord and the nerves that leave it to supply the chest wall. The nerves leave the spine by travelling out holes between the vertebrae called foramina. The thoracic spine is different to the rest of the spine in that it is supported by the ribs.



## THE DISC

This is the cause of all the trouble. It is made up of two components. An outer capsule (annulus fibrosis) and a soft centre (nucleus pulposus). The capsule (made from laminated fibres) holds in the soft contents and this allows movement of the vertebrae on one another. It can be likened to a tube of toothpaste only the contents is much thicker and it is like soft rubber.

## WHAT HAPPENS TO CAUSE A PROLAPSE ?

As your disc gets older it starts to degenerate. The capsule develops tiny tears in it. These tears can also occur from overloading or straining the disc. Overloading can also produce a tear in the central soft component. Usually there is already something abnormal in a disc before it ruptures. The disc does not have to be overloaded to produce a prolapse, it can happen rolling over in bed.

## HOW CAN THIS AFFECT YOU ?

Most people hurt there back lifting something and this then causes back pain.

The commonest symptoms.

From the Disc or pressure on a Nerve:

### Mid Thoracic Pain

This may be non specific. It may be related to the spasm in the muscles of the back of the thoracic spine. If it is unilateral it may be related to some nerve root irritation.

### Chest Wall Pain (Thoracic Radiculopathy)

This is usually from compression of the nerves in the back that normally travel around the chest wall. This may produce pain along the length of the nerve. This feels like a burning or stabbing pain in your side. Your doctor can tell which is the affected nerve from the type of pain.

### Tingling

This is usually in chest wall but may be in the legs also.

From pressure on the Spinal Cord:

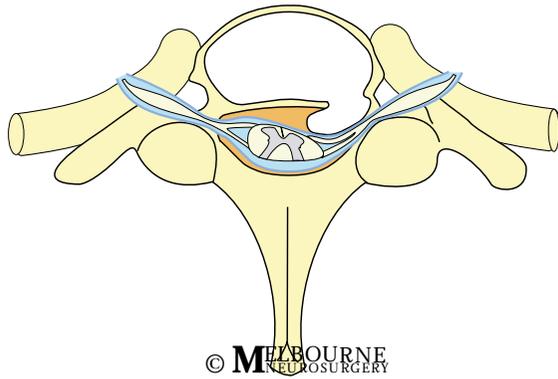
When the spinal cord is compressed there is difficulty in traffic (impulses or information) getting up and down the spinal cord. This does not always occur.

### Numbness and Weakness

The signals that direct the strength in the legs are not getting down the spine and the information about the sensation that you are feeling is not getting back up to the brain.

### Difficulty walking from leg stiffness

The legs are co-ordinated in their movements in the spinal cord and the brain. Both parts are not working properly when the spinal cord is compressed. This makes your legs stiff and they will get worse the faster that you try to walk. This may cause falls.



## HOW IS IT DIAGNOSED ?

Your doctor will usually make the diagnosis from the symptoms that you have and this will be helped by what he finds on examination and any tests he might do.

### PLAIN X-RAYS

These are often the first test. These show that the discs have lost height, that there may be spurs (osteophytes) and that the spine may no longer be straight.

### CAT SCAN

This is usually next. This is a computerised X ray of your back that will show how much the diameter of the canal is reduced and how far out the discs are. It is not as good as the next test.

### M.R.I. (Magnetic Resonance Imaging)

This is the next test. It produces pictures like the CAT scan but they are generated using a magnetic field and not using radiation. This test is not always needed if the CAT scan shows the problem.

### THORACIC CT MYELOGRAM

This is an older test that involves the injection of contrast into the fluid around the lumbar nerves (C.S.F) and this is allowed to flow up to the thoracic spine and followed by a CAT scan. The contrast makes it easier to see what is going on. This is sometimes used if the M.R.I. is of poor quality or if you cannot have an M.R.I.

You are referred to a specialist after the CAT scan in most cases and they organize any further investigations.

The common specialists to be referred to are:

- Neurosurgeons
- Neurologists
- Orthopaedic Surgeons
- Rheumatologists

In most cases the symptoms will resolve spontaneously. This will depend partly on the size of the prolapse. It takes about 6 weeks in most cases. The first 2 weeks things can be quite bad. The next 2 weeks things start to improve and by the end of the 6th week you are substantially better. Your doctor may not investigate your back initially as they might be waiting to see if you improve. If you have the symptoms suggesting pressure on the spinal cord then it is important to be investigated early and sent to a specialist for an opinion. Visit your local doctor as they can advise and help co-ordinate your care. Initially you may need to rest and take some time off work. After a while you will find that not doing anything will actually make your symptoms worse. It is important not to lift anything heavy while you are recovering (your doctor will tell you how long you cannot lift for). Some sports may aggravate your symptoms.

## HOW IS THIS TREATED ?

This depends on:

- How bad your symptoms are
- What type of symptoms you have
- What the specialist finds when he examines you
- How bad the investigations show your spine to be

If your symptoms are mild then we will wait and watch to see if you get better on your own. Some people get benefit from physiotherapy and anti-inflammatories. Your local doctor will usually have tried this and general pain medications. If there is evidence of cord compression on your examination you will be investigated and treated accordingly. Unless there is cord compression symptoms we expect you will get better on your own. What needs to be done if you do not get better will depend on your Investigations.

## IS SURGERY ALWAYS NEEDED ?

No In most cases you will get better on your own !

## IF YOU NEED SURGERY WHAT WILL IT BE ?

THERE ARE THREE TYPES OF OPERATION  
The surgeon decides and it depends on many factors

### THORACIC LAMINECTOMY

This is the removal of one or more complete lamina

### THORACIC HEMILAMINECTOMY & DISCECTOMY

This is the removal of part of the lamina and removal of the disc from the nerve root canal.

### THORACOTOMY AND DISCECTOMY WITH FUSION

This is where the chest is opened to get to the disc and remove it so that it does not press on the spinal cord.

## FOR ABOVE PROCEDURES SEE THE RELEVANT PROCEDURE LEAFLET

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