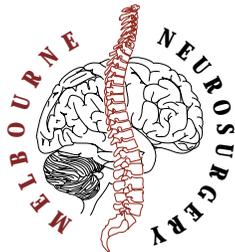


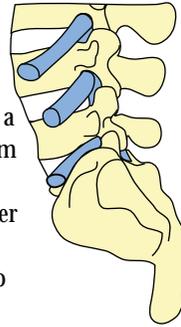
## INFORMATION LEAFLET

# LUMBAR SPONDYLO- LISTHESIS



### THE LUMBAR SPINE

The LUMBAR spine (the bones and discs of the low back) 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 all the nerves that go to the legs. The nerves leave the spine by travelling out holes between the vertebrae called foramina.



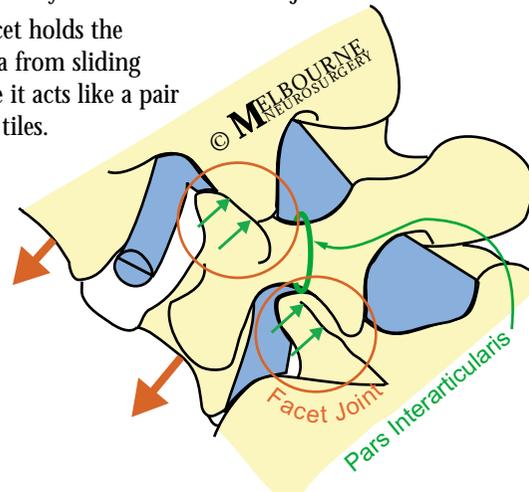
### THE DISC

This is made up of two components. An outer capsule (anulus fibrosis) and a soft centre (nucleus pulposus). The capsule (made from lamminated 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.

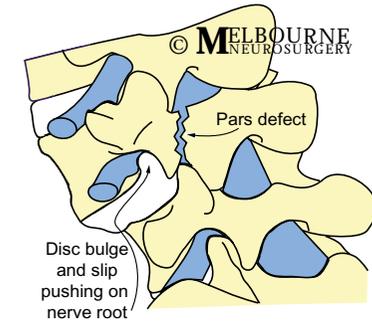
### WHAT IS A SPONDYLO-LISTHESIS ?

This is when one vertebra starts to slide off the top of the one below it. Normally the vertebra are prevented from doing this by the disc and the facet joints.

The facet holds the vertebra from sliding because it acts like a pair of roof tiles.



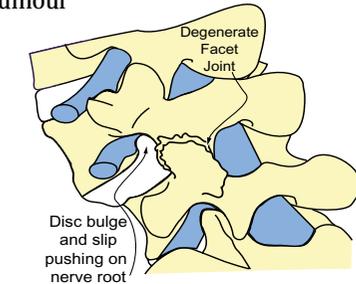
If an anomaly occurs either in the facet joint or the part of the bone (pars inter-articularis) that holds the facet to the vertebra then the vertebra on top starts to slip off.



### WHAT HAPPENS TO CAUSE A SPONDYLO-LISTHESIS ?

There are lots of causes

- (i) Congenital deficiency of the pars
- (ii) Abnormality in pars due to fracture
- (iii) Degenerative change in facet joints or pars
- (iv) Tumour



### HOW CAN THIS AFFECT YOU ?

The commonest symptoms.

#### Nothing

There are a large group of people who have a spondylolisthesis and have no symptoms at all.

#### Low Back Pain

This may be non specific or actually a part of the leg pain if it is unilateral. The cause of the back pain is thought to be related to strain on the disc, facets and muscles in the back

#### Leg Pain (Sciatica)

This is usually from compression of the nerves in the back that normally travel down to the leg. This may produce pain along the length of the nerve in the leg. The nerve in the leg is the sciatic nerve and hence the term sciatica for the pain.

### **Numbness and Weakness**

This does not always occur. If it does it means that a nerve is very compressed because the nerve is not working properly.

### **Tingling**

This is usually in the bottom of the leg or foot.

### **Cramps**

These occur in the muscles that are controlled by the affected nerve. They may also occur in the muscles of the back adding to the back pain and these may occur in spasms.

## **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.

## **HOW IS THIS TREATED ?**

### **IN MOST CASES THE SYMPTOMS WILL SETTLE**

**Rest** initially then **Exercise**

**Pain Medication** These should be taken regularly to keep the pain away. In the first few weeks they may not work too well.

**Anti Inflammatory Drugs** If you have problems with ulcers (stomach ) or reflux then you cannot take them. These also may not work initially (because the nerve is so compressed) so if you have stopped them they could be tried again.

**Physiotherapy** There are different types available and you should discuss this with your physio.

**Epidural** Some people get better with this and it involves injecting some steroids around the nerves in your spine.

## **Tests and Referral ?**

### **PLAIN X-RAYS**

These are often the first test. These show the slip and usually any fracture present.

### **CAT SCAN**

This is usually next. This is a computerised X ray of your back that will show the degree of nerve root compression.

**You are referred to a specialist after the CAT scan in most cases and they organise any further tests.**

### **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.

### **The common specialists to be referred to are:**

Neurosurgeons  
Neurologists  
Orthopaedic Surgeons  
Rheumatologists

## **HOW LONG UNTIL IT GETS BETTER ?**

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. As a general rule, the pain improves first, any weakness gets better next and the numbness is the last to improve.

## **WHAT SHOULD YOU DO ?**

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. This is the time to get back to work doing what you are capable of. Sitting for long periods can aggravate the symptoms. 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. Generally it is important to avoid the type of work that involves heavy lifting, some people will have to change their occupation.

## **WHEN IS SURGERY SUGGESTED ?**

(Most patients do not get to this point)

If you are not getting better after trying everything.  
If you have severe weakness/numbness.  
If you cannot cope with the Pain.  
If you are getting worse.  
If the slip is getting worse on serial X - rays (>30%)

## **IF YOU NEED SURGERY ?**

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

### **LUMBAR LAMINECTOMY / MICROLAMINECTOMY**

This is usually only for the degenerative type and is to decompress the nerves only.

### **LUMBAR FUSION**

This is combined with a laminectomy and usually is the only way to prevent further slip.

FOR ABOVE PROCEDURES SEE THE  
RELEVANT PROCEDURE LEAFLET

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