

# Lumbar Spine Stenosis

**Information for patients** 



Information in this booklet is intended to be used as a guide. It gives you an idea about how *Lumbar Spine Stenosis* can be managed. However, you should remember that every case is different, and symptoms and management can vary from person to person.

### **Lumbar Spine Stenosis**

Lumbar Spine Stenosis is a term that means the narrowing of the spinal canal in your lower back. The spinal canal is the tunnel where the spinal cord (nerve) sits. This can commonly cause low back pain and/or leg symptoms. It can be very painful but is not usually serious, and most patients manage well over time.

Symptoms vary from patient to patient. As well as lower back pain, you may experience numbness or weakness in the legs and buttocks, and sometimes a feeling of unsteadiness. The pain often occurs with walking or standing for a long time and eases when sitting or bending forwards.

Lumbar Spine Stenosis is usually diagnosed from the signs and symptoms you describe. If the diagnosis is unclear, or your symptoms are worsening, you may require an MRI scan. However, there is often a weak link between the changes in your back seen on an MRI and the severity of your symptoms.

There is no cure, but you can improve your function and symptoms by changing your activities, improving your hip and back flexibility and improving your general fitness. Using medication will help you to cope with the pain and remain active. Keep your back moving to prevent stiffness.

Exercise is an important part of managing Lumbar Spine Stenosis. However, if your pain remains unmanageable, injections can sometimes be used to help settle it. You will need to be referred onto pain management or the spinal team to discuss this. A final option may be spinal surgery, with a 'lumbar decompression'. However, it is difficult to say whether surgery will benefit you and it is unlikely to resolve all of your symptoms.

### What is Lumbar Spine Stenosis?

As we get older our backs go through the natural ageing process. Degenerative (wear and tear) changes may occur, which can cause narrowing (stenosis) of the spinal canal. Spinal stenosis can affect any part of the spine but is most common in the lower back.

Lumbar Spine Stenosis is a term used to describe a narrowing of the spinal canal in the lumbar spine (lower back). This can give back and leg pain / symptoms.

### Why me?

Spinal stenosis is very common. In most people the spinal canal gets narrower as we age.

This is because the joints of the spine get larger due to age related changes. This can then reduce the space in the spinal canal, leaving less room for the nerves. Some people are born with a narrow spinal canal, which can increase

their risk of developing spinal stenosis. Spinal stenosis most frequently occurs in those aged 60 years or older.

We know that narrowing of the spinal canal can lead to symptoms of spinal stenosis but not all patients will experience symptoms. The severity of pain and symptoms will vary from patient to patient.



### **Symptoms**

## Some people with spinal stenosis might never have symptoms.

Lumbar stenosis may lead to back and/ or leg pain. Patients may experience numbness or weakness within the legs and buttocks and feelings of unsteadiness in one or both legs. Most typically, the pain occurs with walking and standing for any length of time. This is because the 'canals and tunnels' for the nerves in the spine are narrowed when we stand upright or lean back.

People with stenosis often find that if they do things such as; sit down, bend forwards, cycle or walk leaning on a shopping trolley, their pain is much better. This is because bending forwards causes the spinal canal to widen, giving the nerves more space.

### Is it serious?

Lower Back & Leg Pain can be painful and cause you to struggle with your normal activities, but it is not usually serious or an emergency.

### **Cauda Equina Syndrome & Spinal Myelopathy Symptoms**

These are rare conditions where the spinal cord gets compressed. If you have, or start to get, any symptoms listed below, you should seek urgent medical attention via an Emergency Department (A&E):

- Problems going to the toilet including a new feeling of wanting to empty your bladder but being unable to, continuation of emptying your bladder when you thought you had finished or, incontinence of bladder or bowels
- Tingling or numbness to your genitals, back passage (anus) or upper, inner thighs
- Large reduction in strength and/or coordination of arms and hands, and/or legs
- Unexplained balance problems or unsteadiness in your legs.

### **Diagnosis & Investigations**

**Lumbar Spine Stenosis** is diagnosed from the signs and symptoms that you describe. Assessment of the lumbar spine and nerve function by health care professionals may help to inform this diagnosis. If the diagnosis is unclear or if surgery or injections are being considered, an MRI scan of the lumbar spine may be arranged. There is often not a strong link between the severity of changes seen on an MRI and the amount of pain you are in.

### Will it get better?

Although *Spinal Stenosis* can affect your quality of life it is not damaging or serious. You need to continue to use your back and continue walking to keep it strong. Although this may be painful it will not cause any further damage to your spine.

It is difficult to predict what will happen to your symptoms over time, but research suggests that 60% (3 in 5) of patients with lumbar stenosis will remain the same, often for many decades. 20% (1 in 5) will report an improvement in symptoms, and 20% (1 in 5) will feel deterioration in their symptoms over time. Worsening of symptoms happens slowly and usually means that your walking distance will reduce gradually. Sometimes the nerve supply to the leg(s) will become increasingly affected.

### Management

Spinal stenosis can be restrictive and can significantly affect your quality of life. If the symptoms and pain are manageable, then no intervention may be required. In most instances the symptoms can be managed through simple treatment that does not require an operation.

There is no cure for this condition, but you can improve your function and symptoms by changing your activities and imprpoving your general fitness. Increasing your knowledge and, hip and spinal flexibility is imprortant to help you manage over time.

### What to Avoid

When starting to manage your condition, there are some handy hints that may be temporararily avoided;

- Prolonged standing
- Prolonged overhead activities
- Use of backpacks
- Overhead working postures
- Prolonged aggravating activities



### **MEDICATION FOR PAIN CONTROL**

Controlling your pain allows you to continue to function and helps you cope. Your GP may have already discussed medication to help with your pain and the correct ways to take pain relief. They may recommend that you take it as a short course rather than 'as and when' the pain is bad. This often includes 'non-steroidal anti-inflammatory' medication such as ibuprofen, paracetamol or Zapain. Anti-inflammatory gels can also be used. Please always read the instructions before using these products.

If you have nerve pain, your health care professional may also discuss additional medication, which specifically targets nerve pain.

### **KEEP ACTIVE**

By keeping your back moving you may prevent it from becoming stiff. Even if it hurts a bit you are not causing any damage. It is important to remember that 'hurt does not mean harm'.

### **PHYSIOTHERAPY**

After an assessment, physiotherapy may be offered. Exercise therapy is an important part of the management of this condition. This includes spinal mobility and back flexion exercises, hip mobility and a compehensive strengthening programme. Aerobic exercise is also encouraged, such as cycling and water based exercise (unweighted exercises). If using a treadmill then an inclined position is recommended; you can lean forwards and hold on to the bars. Pace your activities, for example, the amount you walk before resting. You may like to try a 'Nordic' pole / stick.

### OTHER TREATMENTS

If symptoms remain unmanageable despite trying all the treatment options, or your leg symptoms continue to cause a severe restriction in your mobility, spinal injections can sometimes be used to xhelp settle the pain. Local anesthetic and steriods are injected to settle any inflammation. Nerve root blocks, epidurals or facet joint injections may be offered to you depending on your MRI findings and correlated symptoms. You will need to be referred onto a pain management or the spinal team to discuss this.

### **SPINAL SURGERY**

Spinal surgery for lumbar stenosis is usually a lumbar decompression. This is where the bone that is compressing the nerves is removed to give the nerve more space. Generally, surgery is more likely to help with leg pain more than back pain. It is difficult to say if surgery will benefit you, and it is unlikely to resolve all of your symptoms. Successful effects of surgery are most noticeable after 3-6 months. Improvements appear to remain consistent for upto 4 years. Surgery can lead to a 60% improvement.

# Surgery may be considered in the following patients:

- Patients who have no improvement with simple treatment in 3-6 months
- Patients who have moderate to severe symptoms with definite spinal stenosis confirmed via MRI
- Patients who have a significant reduction in quality of life
- Patients who are medically fit and well, with no other significant health problems

### **Lumbar Spine Stenosis**

### **EXERCISES**

There are some examples of basic exercises that you may wish to try. Begin with a small number of repetitions, perhaps 5 to 10 of each exercise and build this up gradually. It is okay to feel a stretch in your spine while doing the exercises. Try to add these into your daily routine.



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### **EXERCISE 1**

### Lying on your back:

Slowly bring one knee towards your chest and assist with your arms. Feel the stretch in your buttock and low back. Repeat on the other leg. If this is difficult use a towel under your thigh and assist with your arms.



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### **EXERCISE 2**

### Lying on your back with your knees bent:

Gently rotate your knees from one side to the other. Feel the stretch in the lower back and side.



### **EXERCISES**



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### **EXERCISE 3**

### Lying on your back with your knees bent:

Bring both knees into your chest. Feel the stretch in your lower back. Return your feet back to the start position.



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### **EXERCISE 4**

### In sitting:

Slowly rotate your pelvis backwards, maintain this position and bend forwards by rolling your spine down. Slide your hands towards your ankles. Feel the stretch in your lower back.

# **Lumbar Spine Stenosis Further Information** www.spinesurgeons.ac.uk MSK + together

www.nhs.uk