Lumbar Spinal Stenosis

Lumbar spinal stenosis is a type of condition where either the spinal canal or one of the vertebral foramina ends up becoming narrow. If the narrowing is significant, it can cause the spinal nerves or cord to become compressed, which causes pain associated with lumbar spinal stenosis, such as buttock pain, lower back pain, numbness and leg pain that end up becoming worse when walking and get better when relaxing.

Spinal stenosis can be very problematic. It can cause compression of the spinal cord. It can happen in the neck, middle back or lower back, but with lumbar spinal stenosis this refers to the lower back. At the bottom of the spinal cord is the cauda equina (horse's tail) and compression here can also be very problematic.

Symptoms include loss of sensation around the anus or a lack of control going to the toilet. If these symptoms occur then it might be a medical emergency and you must get to a doctor or the hospital straight away for investigation.

But more typical symptoms of spinal stenosis include pain into the leg, numbness in the foot and leg, muscle wasting in the leg, pain on walking, or weakness in the leg.

Lumbar Spinal Stenosis Anatomy

The spinal cord runs from your brain down to your lower back. It is the main nerve communication in the body, and from the spinal cord runs the nerves that controls virtually every action that your body requires for living. The spinal cord runs through a series of holes in each vertebra that collectively form a canal called the spinal canal. This canal can naturally narrowed due to genetics (i.e. some people just have a smaller spinal canal, so are more prone to spinal stenosis or nerve impingement). In others, wear and tear can thicken the canal with bone forming stenosis. Also changes in the position of the vertebrae such as slippage of the vertebra can also cause spinal stenosis. Disc problems such as a disc extrusion or severe disc prolapse can impede into the spinal canal and cause spinal stenosis. Other and rarer causes include a space occupying lesion such as a tumour or cyst.



An MRI scan showing lumbar spinal stenosis from a large disc prolapse and degeneration of the spine

How to Treat Lumbar Spinal Stenosis:

1. Physical Therapy

Massage, stretching exercises, abdominal strengthening and lumbar strengthening help with managing the symptoms associated with this condition. If the therapist suspects there is a real problem then they may ask you to get an MRI scan to investigate further.

2. Anti-Inflammatory Medication

Since stenosis pain is attributed to pressure placed on the spinal nerve, reducing the inflammation surrounding the nerve can help to relieve some of the pain. A non-steroidal anti-inflammatory might provide you with relief initially. When used over a 5-10 day timeframe, they can provide you with an anti-inflammatory effect as well. Long term use should be avoided.

3. Lumbar Traction

Traction can be useful to some people. It helps to reduce pressure on the spine and can be useful in cases of disc degeneration.

4. Acupuncture

Acupuncture is helpful in treating some of the pain associated with less severe instances of the condition. Even though it can be safe, long-term success hasn't been proven but nevertheless many people have found considerable long term benefits with acupuncture.

Tips:

- Exercise and physical therapy can help to prevent the aggravation of symptoms.
- One of the main risk factors associated with lumbar stenosis is aging because it is attributed to spinal degeneration.
- Osteoporosis can lead to compression fractures of the lumbar vertebrae resulting in stenosis occurring.
- In the majority of situations, symptoms tend to improve in individuals when the patient leans or sits forward.
- Symptoms tend to get worse over the course of time. Degenerative arthritis is a progressive type of disease that will slowly become more severe over the course of time. If the condition isn't treated, it can lead to loss of leg function and increasing weakness.