

Lumbar spinal stenosis

What you're feeling

Lumbar spinal stenosis is a narrowing of the spaces in your lower spine. This narrowing presses on the nerves that run down your legs. Symptoms usually creep up slowly over time, so you may not be able to pinpoint when they started.

The typical pattern is called neurogenic claudication. It means leg pain, numbness or weakness that starts when you walk or stand, and eases when you sit down or bend forward. Relief can take up to 20 minutes of rest. Many people notice they can walk further uphill or upstairs than on flat ground, because leaning forward as you climb opens up the narrowed spaces. You may find you can ride a bike comfortably when walking is too painful, and that pushing a shopping trolley helps, because it lets you lean forward as you move.

The narrowing happens most often in the lower part of the lumbar spine, so symptoms usually show up in your buttocks and legs rather than just your back. Daily tasks that involve walking or standing still, like grocery shopping or waiting in a queue, can become hard work. Bending forward to rest a hand on a bench or trolley often brings relief.

It is worth knowing that the narrowing itself develops very slowly. Your nerves usually have time to adjust, which is why many people with this condition have few nerve-related problems even when the narrowing is advanced. It is also common for scans to show narrowing in people who have no symptoms at all. More than 20% of people over 60 with no pain have MRI signs of lumbar spinal stenosis.

Some leg symptoms come from narrowed blood vessels rather than narrowed nerves, and the two can feel similar. With circulation problems, the ache sits in the upper calf, settles after about 5 minutes of standing still, and gets worse walking uphill or on a stationary bike. With spinal stenosis, you need to sit or bend forward to get relief. Telling these patterns apart is an important part of working out what is causing your symptoms.

What's actually happening

Your spine has a tunnel down its middle that protects the nerves running to your legs. In spinal stenosis, that tunnel slowly gets crowded from several directions at once. The discs between your vertebrae act like shock absorbers, and as they wear down they lose height. That changes the way the small joints at the back of your

spine carry load, so their ligaments and joint linings thicken and take up more room. A ligament inside the canal also stiffens with age and can bunch up like a folded curtain.

The result is less space for the nerves. The narrowing happens most often at the two lowest mobile levels of the lumbar spine, which is why your symptoms show up in your buttocks and legs. Bending forward makes the tunnel wider, and straightening up or leaning back makes it narrower. That is exactly why walking brings your symptoms on and sitting or leaning on a trolley eases them, as described above.

Sometimes the crowding happens where a nerve leaves the spine through a small side tunnel on its way into your leg. The nerve roots there are bulky and the tunnel is at its tightest in the lower back, so those exit points are a common trouble spot. Pressure and swelling in a squeezed nerve can cause the burning or aching you feel down one leg.

The narrowing itself builds up so slowly that your nerves usually have time to adjust, which is why many people have few nerve problems even when scans show advanced narrowing. Scans also cannot tell you how much pain you will feel, because the amount of narrowing seen on MRI does not match how bad the back pain is. For most people, symptoms settle with non-surgical treatment, and about 30% to 50% improve over time. Around 15% get worse. Waiting before any operation is safe for most people, and surgery is generally offered when non-surgical care has not controlled your symptoms.

What we can do about it

Dr Kieran Hirpara, a spine surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. We assess your history, examine you, and arrange imaging where it is needed before talking through treatment.

Most people start with non-surgical care. You can try short periods of rest, but no more than 2 days, and keep moving after that. Physiotherapy aims to build trunk-stabilising strength and good general fitness, and for some people this controls the leg symptoms that walking brings on. A structured education and exercise program can also help. Give these measures a fair trial before thinking about anything further, because waiting presents little danger and conservative care can control or prevent symptoms getting worse. Traction has no proven benefit for this condition.

Pain medication can help you stay active. Anti-inflammatory medicines or acetaminophen (also called paracetamol) are the usual options. Cortisone injections into the space around the nerves can relieve leg pain for a limited time, though they do not change how well you function day to day, and no study has shown a lasting benefit. Adding cortisone to a numbing injection did not improve pain or function at 12 months.

Surgery is considered when pain keeps building despite these measures, or when there is progressive weakness or problems with bowel or bladder control. Scans on their own are never a reason for an operation. The main operation is a decompression, which means removing bone and thickened ligament to give the nerves more room. If part of the spine has slipped or is unstable, a fusion may be added to hold the segment still. We will talk through what each option involves and decide together what suits you.

What to expect

For most people, spinal stenosis is managed well without an operation. Non-surgical care can control or prevent your symptoms getting worse, and waiting before any surgery presents little danger for most people. If you do decide against surgery, you can expect your symptoms to persist rather than disappear.

If you go ahead with surgery, the outlook is generally positive. Surgery has been shown to control pain and improve function better than non-surgical care. This benefit holds for people with mild, moderate or severe narrowing, though people with severe narrowing tend to have a less smooth recovery than those whose narrowing is milder. Some things work against you: long-standing leg numbness before the operation, other health conditions, or previous spine operations all make a good result less likely.

Recovery is not a straight line, and it is honest to say so. Most people feel steadier and can walk further as weeks pass, but the full picture takes months, not days. Some people develop new low back pain or leg pain years later, and a few need further surgery down the track. Your surgeon will talk through these possibilities with you before any decision is made.

One thing worth knowing: if you also have a hip or knee replacement planned or already done, spinal stenosis can affect how well that joint works for you. People with stenosis tend to be less satisfied and less active after joint replacement than people without it, even though the joint itself holds up just as well.

The overall message is a measured one. This condition rarely goes backwards quickly, and you have time to try the simpler options first. If surgery does become the right choice, it offers real relief for most people, with some uncertainty about the long term.

When to see someone

See your GP if leg pain, numbness or weakness keeps coming on when you walk or stand and settles only after sitting or bending forward for up to 20 minutes. Ask for a specialist review if these symptoms are stopping you doing daily tasks, or if non-surgical care has not controlled them after a fair trial. Go to an emergency department if you develop new weakness in your legs or feet, or problems with bowel or bladder control, as these need urgent assessment. Also seek help promptly if pain is severe, getting steadily worse, or disturbing your sleep. Because symptoms creep up slowly, many people put off seeing someone for years, but you do not need to wait until walking becomes impossible before asking for help.