

# Spinal Canal Stenosis

**The spinal canal is a bony tube which starts at the skull and runs all the way down to the tail bone.** In the canal lays the spinal cord and spinal nerves. In medicine we refer to any narrowing as stenosis. Spinal stenosis is when the space around the spinal cord (the spinal column) narrows, compressing a section of nerve tissue. Depending on the location it might be termed 'cervical' stenosis referring to the neck or 'lumbar stenosis' referring to the lower back.

**Stenosis can happen for different reasons.** Most commonly it happens slowly over time due to ageing changes to the discs and joints of the vertebra. As it happens so slowly many people adapt for this change and live with significant canal stenosis but with no symptoms whatsoever. As stenotic changes are so slow, people adapt for change and some people will never have pain.

**For some people however, this narrowing can cause irritation of the nerves or spinal cord.** Having stenosis is a normal part of life, as you get older; your spine will age as well, and does not always have to cause pain.

**Spinal canal stenosis can also happen suddenly due to an injury** causing a disc to bulge suddenly taking up space in the canal. This can suddenly be very painful in the area of the spine affected and also cause pain into the limbs.

## Cervical Spinal Stenosis

**Stenosis in the neck can sometimes cause neck pain which radiates into the arms.** This can also present as pins and needles and numbness in the arms or hands. Often the symptoms can be managed with exercise and manual therapy from a health professional such as a physiotherapist or Osteopath, both of which work in our MSK rehab teams. If the symptoms settle again then this is a sign you are adapting well for the stenosis, and no invasive treatment is needed.

**Occasionally the symptoms become persistent and can go on to affect ability to do things because of pain and weakness in the arms.** In this scenario it becomes appropriate to consider other treatment options such as an operation to open up space around the spinal cord. An MRI would be arranged to assess the amount of narrowing and help you and your medical team make reasonable and appropriate decisions about the most appropriate treatment options for you. There are several different operations that can be done to alleviate the narrowing. The best option for you would be planned by a spinal surgeon. The surgeon will consider how they can reduce the narrowing most effectively with least risk to your overall wellbeing from the operation itself. It may involve trimming back the disc, or the joints, or fusing 2 vertebra together.

## Lumbar Stenosis

**The main symptoms of lumbar spinal stenosis are pain, numbness, weakness and a tingling sensation in one, but more often in, both legs.** The main complaint people tell us they have is pain in their legs on walking, and that sitting or bending over forwards helps to relieve the leg pain. This is because the action of flexing the spine opens up space in the lumbar spinal canal giving more room to the nerves.

**Like cervical stenosis, in most cases the symptoms can be managed with conservative strategies** like exercise and manual therapy from a health professional such as a physiotherapist or Osteopath, both of which work in our MSK rehab teams. If the symptoms settle again then this is a sign you are adapting well to the stenosis.

**If the pains in the legs are having a significant impact on walking then it becomes appropriate to consider other treatment options.** An MRI would be arranged to assess the amount of narrowing and help you and your medical team make reasonable and appropriate decisions about the most appropriate treatment options for you.

**The symptoms are commonly mild and slowly progress, but in very rare cases the narrowing can cause compression of the Cauda Equina (nerves at the base of the spine).** This can potentially lead to damage. It's important that those with lumbar stenosis know what the symptoms of Cauda Equina compression look like so they can seek emergency medical assessment if it occurs. Left untreated, Cauda Equina compression can cause nerve damage in a matter of hours and the symptoms to become permanent. The symptoms of Cauda Equina syndrome include loss of control of the bladder or urinary retention, loss of control of the bowel, altered sensation around the genitals and back passage, loss of erectile function, persistent numbness and weakness and pain in both legs. If these symptoms are present then it's important to attend A&E immediately for urgent assessment to consider arranging an MRI to confirm if there is any Cauda Equina compression that requires emergency surgery.