

Treatment

1. Conservative Treatment

Early stage spinal canal stenosis can be treated conservatively if the symptom is not severe. Life style adaptation, medication, physiotherapy and epidural steroid injections are the common modalities.

2. Surgical Treatment

If symptom is severe and disabling and conservative treatment fails, then surgery can be considered and gives reliable good results.

a) Classical Decompression

The fundamental in surgery for spinal canal stenosis is good central and root canal decompression and pre-empting instability by fusion with or without pedicle screw instrumentation.

b) Minimally Invasive Spinal Decompression and Instrumentation/Fusion

If the stenosis is predominantly of the root canal, percutaneous pedicle screw instrumentation/fusion and limited open root canal decompression can be employed to limit the extent of muscle dissection. Faster recovery is seen with this surgery.

c) Interspinous Spacer

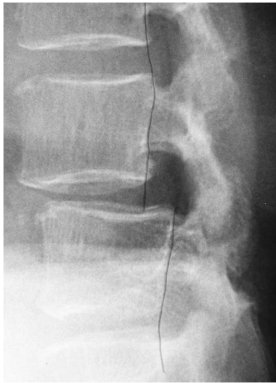
This new procedure involves implanting a spacer between the adjacent spinous processes of the stenotic segment. Distraction of the adjacent spinous processes enlarges the root canal and this may be adequate to relieve the nerve root compression. The procedure can be done percutaneously or through a small open incision. It is effective for patients with predominantly root canal stenosis but is unlikely to benefit those with severe global type of stenosis.



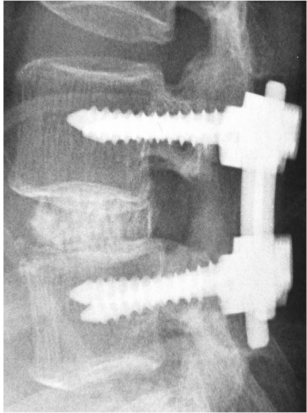
MRI axial view of normal lumbar canal



MRI axial view of stenotic level



L4/5 spondylolisthesis with stenosis



L4/5 disectomy, pedicle screw instrumentation and interbody fusion.

Summary

Spinal canal stenosis is a common condition affecting mainly those above fifties. Most patients can be managed conservatively in the early stage. Surgery for severe stenosis reliably yields good results.

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Lumbar Canal Stenosis

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Welcome

Here is our second issue. We aim to cover the common problems family doctors will encounter in their everyday practice. This issue will discuss the symptoms and treatment options of lumbar canal stenosis. We hope you find these articles useful.

Thank you for the positive feedbacks.

LUMBAR SPINE CANAL STENOSIS

Etiology

Spinal canal stenosis may be congenital or acquired. Congenital spinal canal stenosis is associated with achondroplasia.

Acquired spinal canal stenosis is due to degenerative changes resulting in disc bulging, facet joint hypertrophy and thickening of ligament flavum. It is common beyond the age of 50. Spinal canal stenosis is also seen in spondylolisthesis and degenerative scoliosis.

Clinic Presentation

Typically patient complaints of low back pain radiating down to the thighs and legs associated with standing and walking. It eases off with sitting. This is termed neurogenic claudication and is classical of spinal canal stenosis. In patient with spondylolisthesis, low back pain can be quite severe because of instability. The nature history of spinal canal stenosis is gradual progression with worsening of symptom with time.



MRI showing sagittal view lumbar spine - L4/L5 stenosis due to degenerative bulging disc and hypertrophied facet joint.