

Lumbar Canal Stenosis - Bombay Spine Clinic

- Lumbar Canal Stenosis

What Is It?

- Lumbar Canal Stenosis is a condition in which the spinal canal in the lower back becomes narrowed, resulting in compression of the nerves that travel to the legs. It most commonly occurs due to age-related degeneration of the spine, including disc bulging, thickening of ligaments and enlargement of spinal joints.
- Lumbar canal stenosis is a common cause of leg pain, numbness and difficulty walking in older adults. Symptoms often develop gradually over time and may progressively worsen if left untreated.
- Common Symptoms
- Patients may experience:
 - Pain in the lower back
 - Pain radiating into one or both legs
 - Tingling or numbness in the legs
 - Heaviness in the legs while walking
 - Weakness in the legs
 - Difficulty standing for prolonged periods
 - Cramping or aching in the calves while walking
 - Relief of symptoms on sitting or bending forward
- A Characteristic Symptom
- Many patients report:
 - "I can walk only a certain distance before my legs become painful, numb or heavy, and I need to sit down for relief."
- This is known as Neurogenic Claudication and is a hallmark symptom of lumbar canal stenosis.

Causes & Risk Factors

- Lumbar canal stenosis usually develops due to age-related wear and tear.
- Common causes include:
 - Degenerative disc disease
 - Disc bulging
 - Thickening of spinal ligaments
 - Facet joint arthritis
 - Spondylolisthesis

- Congenital narrow spinal canal
- Previous spinal surgery
- Risk factors include:
- Increasing age
- Obesity
- Sedentary lifestyle
- Repetitive spinal loading
- Previous spine injuries
- When Should You Seek Medical Advice?
- Medical evaluation is recommended if:
- Walking distance gradually decreases
- Leg pain develops during standing or walking
- Numbness or tingling develops in the legs

Symptoms affect daily activities

- Weakness develops in the legs
- Balance becomes impaired

Symptoms progressively worsen despite treatment

- Seek Immediate Medical Attention If:
- Sudden weakness develops
- Loss of bladder or bowel control occurs
- Severe numbness develops around the groin region
- These symptoms may indicate severe nerve compression requiring urgent evaluation.
- How Is It Diagnosed?
- Clinical Examination
- A detailed history and neurological examination help assess nerve involvement and walking limitations.
- X-Ray
- May demonstrate:
- Degenerative changes
- Spondylolisthesis
- Spinal alignment abnormalities
- MRI
- MRI is the most important investigation and helps identify:
- Degree of canal narrowing
- Nerve compression
- Disc pathology

- Associated spinal degeneration
- CT Scan
- May provide additional information about bony narrowing and spinal anatomy.
- Blood Tests
- Usually not required unless infection or inflammatory disease is suspected.

Treatment Options

- Non-Surgical Treatment
- Many patients can be managed without surgery.

Treatment may include:

- Activity modification
- Physiotherapy
- Flexion-based exercises
- Core strengthening
- Walking programs
- Weight management
- Medications
- Lifestyle modification
- The aim is to improve mobility, reduce symptoms and maintain independence.
- Surgical Treatment
- Surgery may be considered when:
- Walking distance becomes significantly limited

Symptoms persist despite adequate treatment

- Progressive weakness develops
- Quality of life becomes substantially affected
- Significant nerve compression is demonstrated on MRI
- Common surgical options include:
- Lumbar Decompression Surgery
- Minimally Invasive Decompression
- Endoscopic Decompression
- Decompression with Stabilization (when instability is present)
- The choice of procedure depends on the severity and underlying cause of stenosis.

Frequently Asked Questions

- 1. What is Lumbar Canal Stenosis?

- It is a narrowing of the spinal canal in the lower back that compresses the nerves travelling to the legs.
- 2. Why do my legs feel heavy while walking?
- Nerve compression reduces the space available for nerves, causing symptoms during standing and walking.
- 3. Why do symptoms improve when I sit down?
- Sitting or bending forward increases the space within the spinal canal and temporarily relieves nerve compression.
- 4. Is Lumbar Canal Stenosis the same as Sciatica?
- Not exactly. Lumbar canal stenosis can cause sciatica-like symptoms, but the underlying mechanism is different.
- 5. Does every patient need surgery?
- No. Many patients improve with non-surgical treatment.
- 6. Can physiotherapy help?
- Yes. Appropriate physiotherapy can improve mobility, strength and walking tolerance.
- 7. What is Neurogenic Claudication?
- It refers to leg pain, numbness or heaviness that develops during walking and improves with rest or sitting.
- 8. Is Lumbar Canal Stenosis age-related?
- Yes. It is most commonly seen in middle-aged and older adults.
- 9. Can symptoms worsen over time?
- Yes. Progressive narrowing may gradually increase symptoms if left untreated.
- 10. Can minimally invasive surgery be performed?
- In selected patients, minimally invasive or endoscopic procedures may be suitable treatment options.
- Related Conditions
- Sciatica
- Slip Disc (Disc Herniation)
- Spondylolisthesis
- Mechanical Low Back Pain (Lumbago)
- Osteoporosis
- Spinal Fracture
- When Should You Consult a Spine Specialist?
- If you experience leg pain, numbness, heaviness while walking, reduced walking distance or symptoms that interfere with your daily activities, consultation with a spine specialist can help determine the cause and guide appropriate treatment.
- Early evaluation is particularly important if weakness, balance problems or progressive neurological symptoms develop.
- Need Expert Advice?
- Book a consultation with Dr. Siddharth Katkade or upload your MRI/report for review through our Patient Resource Centre.

Need Clinical Evaluation or Second Opinion?

This educational document was prepared by **Dr. Siddharth Katkade**. For appointments or to share MRI scan reports for clinical review, call **+91 88507 73095** or consult at Byculla (E) / Khar (W) clinics.