

Best Practice Guideline

Lumbar Spinal Stenosis

I. Diagnosis and Screening

An anatomic condition that stems from narrowing of the central canal, lateral recess or neural foramen, which predominantly affects individuals over the age of 60, and most often caused by degenerative changes in the spine. The most common presenting symptom is low back pain and neurogenic claudication. These symptoms represent intermittent mechanical and/or ischemic disruption of lumbosacral nerve root function. In a few patients, more fixed nerve root injury may occur, causing lumbosacral radiculopathy, cauda equina syndrome, or conus medullaris syndrome.

- MRI of the lumbar spine is the modality of choice for the diagnosis of Lumbar Spinal Stenosis.
- CT myelography is recommended as the definitive preoperative imaging investigation.

II. Treatment

Initial conservative treatment is recommended, unless neurological deficits are present with or without bowel and bladder involvement, in which case a STAT referral to Spinal Surgery is recommended.

Physical therapy is the mainstay of conservative management, strengthening, stretching, active range of motion of lower extremities, aerobic exercise. Techniques to increase lumbar flexion and reduce lumbar lordosis include strengthening of abdominal muscles. Aquatic therapy may help. Dietary modifications.

Pharmacotherapy-Drug therapy includes nonsteroidal anti-inflammatory drugs (NSAIDs), Tylenol, Tramadol, and opiates.

Epidural injections-The available evidence does not support routine use of epidural injections of corticosteroids in LSS.

III. Summary, Surveillance, and indication for Consultation

Lumbar spinal stenosis (LSS) is most often due to degenerative spondylosis; which typically affects individuals over the age of 60 years.

- The prognosis of LSS is benign in that neurologic disability is rare and most patients remain stable over several years of follow-up. However, for some patients, the symptoms become disabling and restrict activity.
- For patients with LSS who do not have fixed or progressive neurologic deficits, we suggest conservative treatment. Physical therapy and/or oral pain medication are often used, although their efficacy has not been rigorously evaluated.

The available evidence does not support the use of epidural injections of corticosteroids.

- Surgical consultation for patients who do not have an adequate clinical response to conservative therapy and who are functionally disabled by their symptoms and for patients who have a progressive neurologic deficit. In the absence of spondylolisthesis (or other complicated spine pathology) decompressive laminectomy without fusion is preferred over more complicated surgical techniques involving fusion with or without instrumentation.
- We recommend urgent surgical consultation for rare patients with a rapidly progressive cauda equina or conus medullaris syndrome or newly emerging bladder dysfunction.

IV. References

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3. Friedly JL, Comstock BA, Turner JA, et al. A randomized trial of epidural glucocorticoid injections for spinal stenosis. *N Engl J Med* 2014; 371:11.
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