Guideline for Hospital Admission

Ministry of Public Health - Lebanon

Diagnosis and treatment of degenerative lumbar spondylolisthesis.

Diagnosis and Imaging

Obtaining an accurate history and physical examination is essential to the formulation of the appropriate clinical questions to guide the physician in developing a plan for the treatment of patients with degenerative lumbar spondylolisthesis.

In older patients presenting with radiculopathy and neurogenic intermittent claudication, with or without back pain, a diagnosis of degenerative lumbar spondylolisthesis should be considered.

The most appropriate, noninvasive test for detecting degenerative lumbar spondylolisthesis is the **lateral radiograph**.

The most appropriate, noninvasive test for imaging the stenosis accompanying degenerative lumbar spondylolisthesis is the **magnetic resonance imaging (MRI)**.

Plain myelography or computed tomography (CT) myelography are useful studies to assess spinal stenosis in patients with degenerative lumbar spondylolisthesis.

CT is a useful noninvasive study in patients who have a contraindication to MRI, for whom MRI findings are inconclusive or for whom there is a poor correlation between symptoms and MRI findings, and in whom CT myelogram is deemed inappropriate.

Medical and Interventional Treatment

Medical/interventional treatment for degenerative lumbar spondylolisthesis when the radicular symptoms of stenosis predominate, most logically should be similar to treatment for symptomatic degenerative lumbar spinal stenosis.

Surgical Treatment

Surgery is recommended for treatment of patients with symptomatic spinal stenosis associated with low grade degenerative spondylolisthesis whose symptoms have been recalcitrant to a trial of medical/interventional treatment.

Direct surgical decompression is recommended for treatment of patients with symptomatic spinal stenosis associated with low grade degenerative lumbar spondylolisthesis whose symptoms have been recalcitrant to a trial of medical/interventional treatment.

Indirect surgical decompression is recommended for treatment of patients with symptomatic spinal stenosis associated with low grade degenerative lumbar spondylolisthesis whose symptoms have been recalcitrant to a trial of medical/interventional treatment.

Surgical decompression with fusion is recommended for the treatment of patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis to improve clinical outcomes compared with decompression alone.

The addition of instrumentation is recommended to improve fusion rates in patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis.

Reduction with fusion and internal fixation of patients with low grade degenerative lumbar spondylolisthesis is **not** recommended to improve patient condition.

Decompression and fusion is recommended as a means to provide satisfactory long-term results for the treatment of patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis.

Checklist:

Clinically	**Present**	**Absent**
Pain		
Analgesia intake > 3 months		
Radiology done		
degenerative lumbar spondylolisthesis classified as high/intermediate grade		
degenerative lumbar spondylolisthesis classified as low grade		
degenerative lumbar spondylolisthesis not classified		
Plain X rays		
MRI		
CT		
Other		
lateral radiograph showing spondylolisthesis		
MRI showing spondylolisthesis		
MRI showing narrowing with spondylolisthesis		
