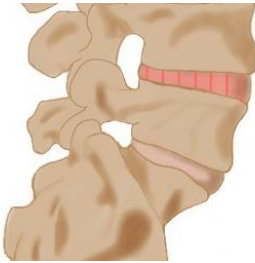
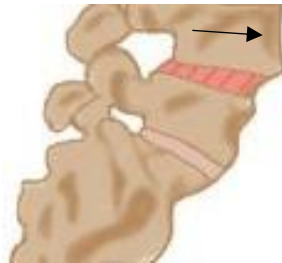


SPONDYLOLISTHESIS

Normal



Spondylolisthesis



Causes

Spondylolisthesis can be caused by trauma (such as a motor vehicle accident or fall) or can be due to age-related changes like arthritis.

Symptoms

The most common symptoms of spondylolisthesis include low back pain, muscles spasms in the back or hamstrings, pain radiating down the leg, or numbness, tingling or weakness in the legs and feet.



What is Spondylolisthesis?

A spondylolisthesis occurs when a vertebra slips out of alignment. A forward slip is usually most painful. This forward shift of the vertebrae causes the spinal canal to narrow (stenosis), which puts pressure on the spinal cord and nerves within the spine.

Likened this to the stacked ring analogy: if rings are stacked one on top of the other and one of the rings slips forward, the space in the center of the rings (where nerves would be in the spine) is narrowed.



Treatments

Not all spondylolistheses require surgery. Often pain can be managed with non-operative treatments including physical therapy for core strength and stabilization. If pain persists despite non-operative treatments, however, surgery may be necessary. Visit our YouTube Page for examples of surgeries for [spondylolisthesis and stenosis](#).

Why does spondylolisthesis require a fusion?

Spinal fusions permanently connect (or fuse) vertebrae in your spine to prevent abnormal motion and correct deformity. Realigning the spine relieves pressure on the facet joints causing back pain and on the nerves causing leg pain, numbness, tingling, or weakness. Without a fusion, the stress from the forward slippage of the vertebrae would continue to cause back pain.

To learn more about why a fusion is needed, please see our [editorial in spine universe](#).

