

Spondylolisthesis

[Spondylolisthesis](#) occurs when one vertebra slips forward in relation to an adjacent vertebra, usually in the lumbar spine. The symptoms that accompany a [spondylolisthesis](#) include pain in the low back, thighs, and/or legs, muscle spasms, weakness, and/or tight hamstring muscles. Some people are symptom free and find the disorder exists when revealed on an x-ray. In advanced cases, the patient may appear swayback with a protruding abdomen, exhibit a shortened torso, and present with a waddling gait.

[Spondylolisthesis](#) can be congenital (present at birth) or develop during childhood or later in life. The disorder may result from the physical stresses to the spine from carrying heavy things, weightlifting, football, gymnastics, trauma, and general wear and tear. As the vertebral components degenerate the spine's integrity is compromised.

Another type of spondylolisthesis is degenerative spondylolisthesis, occurring usually after age 50. This may create a narrowing of the spinal canal (spinal stenosis). This condition is frequently treated by surgery.



Diagnosis of Spondylolisthesis

A routine lateral (side) radiograph taken while standing confirms a diagnosis of a

spondylolisthesis. The x-ray will show the translation (slip) of one vertebra over the adjacent level, usually the one below.

Using the lateral (side) x-ray, the slip is graded according to its degree of severity. The Myerding grading system measures the percentage of vertebral slip forward over the body beneath. The grades are as follows:

Grade 1: 25%

Grade 2: 25% to 49%

Grade 3: 50% to 74%

Grade 4: 75% to 99%

Grade 5: 100%*

*Complete vertebral slippage, known as spondyloptosis

Non-Surgical Treatment

If the [spondylolisthesis](#) is non-progressive, no treatment except observation is required. Symptoms often abate once precipitating activities cease. Conservative treatment includes 2 or 3 days of bed rest, restriction of activities causing stress to the lumbar spine (e.g. heavy lifting, stooping), physical therapy, anti-inflammatory and pain reducing medications, and/or a corset or brace.

A physician may prescribe a custom-made corset or brace. These are made by an orthotist, a professional who takes the patient's precise body measurements, which may include making a cast from which the molded orthoses is made.

Spine Surgery

Surgical intervention is considered when neurologic involvement exists or conservative treatment has failed to provide relief from long-term back pain and other symptoms associated with [spondylolisthesis](#).

A spine surgeon decides which surgical procedure and approach (anterior/posterior, front or back) is best for the patient. His decisions are based on the patient's medical history, symptoms, radiographic findings, as well as the grade and angle of the vertebral slip. A variety of surgical treatment options are utilized. You should discuss what is best for your condition with your spine surgeon.

Recovery

Whether the treatment course is conservative or surgical, it is important to closely follow the instructions of your physician and/or physical therapist.

Avoid heavy lifting, stooping, or certain sports such as football or high impact exercise (i.e. running, aerobics). Any doubts concerning vocational and recreational restrictions should be discussed with your physician and/or physical therapist. They will be able to suggest safe alternatives to help reduce the risk of further back problems.