

So You Have Spondylolisthesis

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Spondylolisthesis is the forward slippage, anterolisthesis, of one vertebra over another. The amount of slippage may range from minimal to large as a percentage of vertebral size and is graded I-V. Arthritic slips in the lumbar spine are usually grade I or II.

Arthritic spondylolisthesis in the lumbar spine occurs most commonly between the fourth and fifth vertebrae (L4/5), but may occur at any level and at more than one level.

Spondylolisthesis is often associated with **spinal stenosis**. Symptoms may include arthritic low back pain (LBP), neurogenic LBP, neurogenic lower extremity pain in one or both legs, or a combination of these symptoms.

Arthritic LBP may feature stiffness and pain in the low back in the early morning, when getting out of bed, or when getting out of a chair after sitting for more than a few minutes; it may be provoked by bending backwards. **Neurogenic LBP** may be experienced after standing or walking for more than a few minutes, often gets worse with more prolonged standing or walking, and is generally relieved by sitting or bending forward. **Neurogenic lower extremity pain** will follow positional patterns similar to neurogenic LBP but is felt in one or both thighs or legs.

Non-surgical treatment recommendations include non-steroidal anti-inflammatory drugs (NSAIDs), analgesics, daily exercise, activity modification, weight reduction as appropriate, and physical therapy (PT). Also, avoidance of tobacco use, particularly if surgery is considered.

NSAIDs may help arthritic symptoms but are less likely to help neurogenic symptoms. When trying an NSAID, if there is no significant benefit after 7 days, it should probably be discontinued. Some people may not be able to take NSAIDs.

Analgesics, or pain relievers, include acetaminophen (Tylenol) and narcotics. Acetaminophen should be the first choice. It may be taken in addition to an NSAID. Narcotic analgesics are rarely appropriate for positional neurogenic pain.

Daily exercise is beneficial in many respects. It is recommended that patients perform a simple exercise program each morning. An easily followed instruction sheet with eight exercises is available for this purpose. **PT** may be helpful for those who have difficulty following the program on the exercise instruction sheet, or for those who have trouble with activities of daily living.

If appropriate, **weight loss** is recommended and may help symptoms and may reduce risks associated with any surgery.

Use of **tobacco products** has many health risks, including increased risk for spine problems and diminished chance for success with spine surgery. For surgery that includes fusion, there is a greater risk of failure to fuse in patients using tobacco.

Invasive treatments include **epidural steroid injections** and surgery. Surgery is an option for significant symptoms not adequately controlled with the above measures. For stenosis associated with spondylolisthesis, surgery should usually include **fusion**. For example, for L4/5 stenosis and spondylolisthesis, L4/5 decompressive laminectomy and fusion may be the recommended surgical treatment.

(09/26/11)