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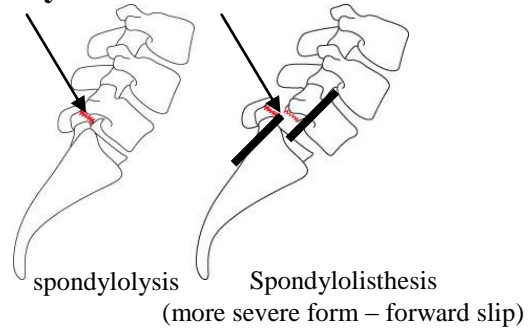
Spondylolysis and Spondylolisthesis

Terms: (Greek) spondy = spine
 lysis = break or separation
 listhesis = slip

Introduction:

Spondylolysis describes a defect in a vertebra in the area where one vertebra connects to another (pars interarticularis). The condition almost always occurs in the low back (5th lumbar vertebra). This mild congenital abnormality (a weak area in the bone) can be stressed by activities such as sports and can produce back pain.

Spondylolisthesis is a more severe form of spondylolysis. The stressed area of the vertebra separates and the 5th vertebra gradually begins to slip forward on the sacrum. Spondylolisthesis is usually stable and may not require treatment, however routine follow up visits are required to make sure that the slip isn't progressing.



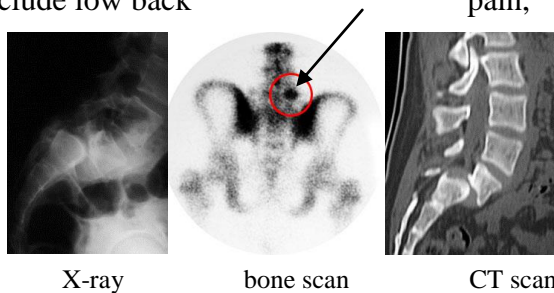
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Examination:

Symptoms of spondylolysis and spondylolisthesis include low back pain, pain extending into the buttocks or leg, and in extreme cases leg weakness.

Imaging studies:

X-rays of the low back help to diagnose spondylolysis and spondylolisthesis. Your physician may order a bone scan, CT scan, or an MRI to further evaluate the condition



physician
 further

Treatment:

Generally both conditions can be treated with rest and anti-inflammatory medications, however in severe cases a brace or even surgery may be required. Spondylolysis is usually self-limiting, and responds to simple treatment methods. Spondylolisthesis (with forward slip of the vertebra) may require more intensive treatment.

Treatment synopsis:

1. **Spondylolysis** – Treatment methods include activity reduction, physical therapy, and occasionally a back brace.
2. **Spondylolisthesis** – With a forward slip of the vertebra, initial treatment is as above. In some cases a back brace is required. In more severe cases surgery (plus bone grafting) is required.

Summary:

Spondylolysis is a common spine abnormality that occurs in 5-6% of all children. Modern treatment is very effective and children with this condition are expected to return to all activities, including sports.