Editorial Note on Spondylolysis and Spondylolisthesis

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Introduction

Spondylolysis (spon-dee-low-lye-sis) and spondylolisthesis (spon-dee-low-li-sis) are two different but related disorders. Spondylolysis is typically the first symptom, but that isn't always the case. The word "spondylolysis" derives from the Greek words "spondylo" and "lysis," which means "to split." Spondylolysis is a failure or fracturing of the pars interarticularis, a thin bridge connecting the upper and lower facets. It can happen on one side (unilateral) or both sides (bilateral) and at any stage of the spine, but the fourth and fifth lumbar vertebrae are the most common. You have a risk of developing spondylolisthesis if you have spondylolysis.

The sliding forward of the vertebral bone is known as spondylolisthesis. The word "listhesis" refers to the act of slipping forward. When the pars interarticularis becomes weakened, it divides, allowing the vertebra to move forward out of alignment, causing pinched nerves and pain. Between the fourth and fifth lumbar vertebrae, or between the last lumbar vertebra and the sacrum, spondylolisthesis is normal.

Causes

Spondylolysis is the most common cause of spondylolisthesis. The cause of spondylolysis isn't well understood. The most common theory is that it is caused by a genetic weakness in the pars interarticularis. Spondylolysis and spondylolisthesis may also be present at birth or develop as a result of an injury. Traumatic fractures and repetitive stress fractures caused by hyperextension of the back (as in gymnastics and football) are also causes. Degenerative arthritis is the most common cause in adults.

Symptoms

Mild spondylolysis and spondylolisthesis normally cause only minor discomfort. In fact, the conditions are often discovered by chance when a person has a back X-ray for an unrelated purpose. Low back pain, stiffness, and muscle spasms are typical symptoms of spondylolysis and spondylolisthesis.

You can also feel numbness or sciatica (pain radiating down one or both legs), but this is rare. Leg pain is normally worsened by standing or walking. The amount of pain you experience is determined by how quickly your vertebrae slip. You can only feel tightness in your hamstrings or be unable to touch your toes if your symptoms are mild, but you will not experience nerve pain.

Affected

Spondylolisthesis is more common among athletes, especially gymnasts and football players. People over the age of 40 are the most frequently affected. Around 5% of Americans are unaware that they have this structural defect. It doesn't mean you'll be in pain just because it shows up on an X-ray.

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