Sports Shorts

Spondylolysis

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Low back pain is a common issue for many young athletes, but it is not something that should be ignored as it can be a sign of a more serious problem. Back pain may originate from the muscles, bones, or ligaments or even the mechanics of how the back is moving. One of the most common causes of back pain in young athletes is spondylolysis. Spondylolysis is a stress fracture of a small bony segment in the back of the lumbar spine called the pars interarticularis. It is thought to be caused from repetitive hyperextension or twisting of the back. Therefore it is more common in sports where arching the back is routine like dance, diving, gymnastics, volleyball and tennis.

Typical signs and symptoms of a spondylolysis are chronic low back pain in the center or just off to the sides that begins without an injury and is worse with arching the back. Some individuals may feel stiffness in their back. To diagnose a spondylolysis, x-rays are usually taken but unfortunately can often be normal. Therefore advanced imaging with an MRI or a bone scan is often required to confirm the diagnosis and to determine if the stress fracture looks new or old.

Treatment includes rest, especially rest from arching the back, pain control and rehabilitation. Some physicians may recommend ibuprofen or acetaminophen as needed for pain. A back brace may be recommended until pain improves. There is no set period of rest but it typically ranges from 4-12 weeks. After rehabilitation, the athlete can be progressed back into sport gradually as tolerated. On average, it can take 3-5 months to fully return to sports. Returning to sports or physical activity too soon can worsen the pain, create a chronic problem and require more time off from sports.

Some individuals with spondylolysis on both sides of the low back can have forward slippage of the vertebra which is called spondylolisthesis. The presentation of spondylolisthesis is similar to spondylolysis but the slippage can occasionally push on or irritate a nerve in the back which can cause numbness and tingling down into the leg. Spondylolisthesis is usually seen on x-ray although a CT or MRI may be obtained to evaluate the slippage in more detail. The treatment varies based on the degree of slippage. In mild cases, the patient is managed similarly to a spondylolysis with rest and physical therapy. In high grade spondylolisthesis, which is rare, referral to an orthopedic surgeon is needed. However, with proper treatment, the majority of patients with spondylolysis and spondylolisthesis are able to return to sport. While kids are still growing they are at risk of further slippage of the vertebra, so even after recovery physicians may obtain x-rays periodically to monitor them.

Tips for Parents:

• Kids with good conditioning and flexibility are at lower risk for injury.
• Have your child stretch regularly and warm up before activity.
• Schedule an appointment with your doctor if your child has fever with back pain, is limping, is missing their sport, has numbness or tingling down their legs, has issues controlling their bowel and bladder, or has pain that wakes them up at night.
• Don’t ignore low back pain, especially if the pain persists over a week.
• Follow up with your doctor if your child has worsening pain.