

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Alan Cranton, DC, ND

Hidden Cause of Low-Back Pain

Injuring a major muscle, such as a hamstring, is no picnic; however, aggravating a small muscle — such as the piriformis — can sometimes pack an equally excruciating wallop.

People with piriformis syndrome typically suffer from low-back pain. Dr. Cranton notes that patients may also experience shooting pain and numbness in the buttocks, thighs or legs.

Exactly Where Is the Piriformis?

The piriformis muscle extends along both sides of the lower buttocks. This small muscle attaches to the front of the middle pelvic bone (sacrum), passes through a hole between pelvic bones (greater sciatic foramen) and connects to the top of the thighbone (femur).

The piriformis has a dual function. When the hip is extended, it helps with rotation of the joint. It also helps the thigh pull away from the body when the hip is involved in bending.

What Is Piriformis Syndrome?

Sciatic nerves travel beneath the piriformis muscle — much like a highway underpass — on their way from the spine to the back of each leg.

Dr. Cranton describes to patients that

piriformis syndrome occurs when the muscle becomes inflamed, forcing pressure on the sciatic nerve and entrapping it against the bones of the pelvis.

Along with compression of the sciatic nerve, the piriformis muscle itself is often tender and painful. Posture is also affected, with the pelvic bones (sacrum and iliac bones) moving slightly out of place. This misalignment is known as a **sacroiliac subluxation**.

The spinal bones of the lower back, known as the lumbar vertebrae, also tend to move slightly out of place — a condition termed **vertebral subluxation**.

In addition to aggravating piriformis inflammation, sacroiliac and vertebral subluxation may trigger a vast array of maladies, including back pain, leg

pain, headache, intestinal problems and infertility, explains Dr. Cranton.

Frequent Misdiagnosis Leads to Needless Pain & Surgery

Dr. Cranton finds that patients often suffer with undiagnosed piriformis syndrome for years. Why? Because the syndrome's symptoms often mimic those of sciatica, a much more common ailment.

Sciatica is frequently attributed to a ruptured or herniated spinal disc. However, an estimated 30 percent to 60 percent of people with disc ruptures experience no symptoms. Consequently, even if imaging tests, such as X-rays or magnetic resonance imaging (MRI), reveal a damaged spinal disc, this may not be the real source of pain.

Although patients with piriformis syndrome usually have concurrent low-back and spinal conditions that worsen the problem, the main source of their pain is not in the spine but in the gluteal region.

Unfortunately, the true origin of discomfort often remains unidentified, even after years of intervention — ranging from unnecessary medication, with potentially hazardous side effects, to needless surgery.

Signs of Piriformis Syndrome

- ✓ Back pain
- ✓ Pain down the back of the thigh or leg
- ✓ Numbness in the leg or foot
- ✓ Aching or numbness in the buttock
- ✓ Aching or numbness in the thigh
- ✓ Pain made worse by sitting, squatting or walking
- ✓ Pain after driving long distances
- ✓ One foot that "rolls in" more than the other
- ✓ Pain aggravated by sports activities



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Chiropractors Check for Piriformis Syndrome

Why is there such a high rate of undetection and misdiagnosis? Because tests for the syndrome are often not included in standard physical examinations for backache.

Fortunately, doctors of chiropractic take care to check for piriformis syndrome — as well as other chronically overlooked conditions — in patients with persistent pain.

It's remarkable how taking just a few minutes to perform a simple, painless test can save patients years of senseless pain.

Who's at Risk?

Although piriformis syndrome can sideline anybody, certain individuals are at higher risk.

The disorder usually attacks adults and is exceedingly rare in children. The complaint is six times more frequent in women than in men (*West J Med* 1976;24:435-9).

In approximately 15 percent of the population, the sciatic nerve passes between — rather than beneath — the muscle belly or the tendons of the piriformis. This abnormal configuration is likely to trap the sciatic nerve, resulting in piriformis syndrome (*West J Med* 1976;24:435-9).

Individuals involved in a trauma, such as a sports injury or motor-vehicle accident, are at an elevated risk of developing this disorder. Those who sit for long periods of time are also prone to this syndrome.

A primarily sedentary lifestyle with dashes of activity here and there — such as practiced by “weekend warriors”— ups the odds of developing piriformis syndrome. This is particularly true for those who don't warm up properly before trading boardrooms for basketball courts, football fields and the like.

Activities that prompt the hip to rotate outward for long periods of time also incite piriformis inflammation. Sports like ballet, skiing, gymnastics and

soccer may increase the risk of developing this disorder. Driving with your foot on the accelerator for long periods of time and using the foot pedal of a sewing machine or pottery wheel can also cause problems.

The Feet Connection

People with flat arches — particularly when one is substantially flatter than the other — face an increased risk of developing piriformis syndrome. And feet that turn inward, or in different directions, spark postural discrepancies in the legs and hips that trigger excessive strain on the piriformis (*J Manipulative Physiol Ther* 1988;11:373-9).

Chiropractic Care for Piriformis Syndrome

Chiropractic care involves a variety of all-natural interventions for piriformis syndrome.

First, the doctor corrects any misalignments detected in the spine or pelvic bones. These vertebral and sacroiliac subluxations are reduced with **chiropractic adjustments**. These gentle maneuvers involve restoring optimal posture by applying mild pressure to misaligned bones.

In addition to chiropractic adjustments, the doctor may recommend physiotherapy modalities along with ice, heat or a combination of the two. The doctor may also provide instruction on in-home stretches and exercises to reduce foot pronation and to keep legs and hips symmetrically balanced. Massage or acupressure are also frequently advised. Finally, the doctor may suggest specialized shoes, shoe inserts or orthotics.

Self-Test for Piriformis Syndrome

Self-assessment is no substitute for a full chiropractic evaluation. However, if you have any of the symptoms associated with piriformis syndrome (fully listed in the box on page one), a simple self-test can help you determine if you fit the syndrome's diagnostic profile.

To perform the test, lie face down on a raised, flat surface — such as a sturdy

table or firm bed. Allow your legs to dangle off the end of the surface and ask a friend to describe the position of your feet. If one foot hangs with the toes pointing outward, it may indicate an inflamed piriformis muscle.

Link to Impotence?

Although additional research is needed before a positive link is established, some investigators speculate that piriformis syndrome may trigger erectile dysfunction by compressing nerves in the pelvic region (*J Am Osteopath Assoc* 1974;73:799-807).

Condition Mimics Piriformis Syndrome

As we discussed, piriformis syndrome is often misdiagnosed as sciatica. However, in some cases, an even rarer condition is attributed to piriformis pain.

According to research, inflammation of another muscle in the region (internal obturator) can also restrict the sciatic nerve — producing a pain pattern mimicking that of piriformis syndrome or sciatica (*Pain* 2003;104:375-80).

Chiropractors Get to the Root of the Problem

Your doctor of chiropractic is committed to identifying root causes of impediments to wellness, such as piriformis syndrome, rather than masking symptoms with unnecessary medication or surgery. This means remaining up-to-date on the latest research and applying that knowledge to best serve patients.

If you suffer from health problems, such as low-back pain, don't delay scheduling an appointment for a chiropractic checkup.

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