**Piriformis Syndrome**

**Overview:** The piriformis, located deep within the buttocks, is a large muscle with two large sections. The sciatic nerve is a large nerve running from the base of the spine down through the back of the leg and passes through the two piriformis muscle bundles. If the muscular tissue or the connective tissue around this muscle becomes inflamed or swollen, it can irritate the sciatic nerve and cause pain that reaches from the buttocks down through the leg. Some patients will complain of lower back pain as well. Typically pain is worse while sitting and especially while driving a car.

**Diagnosis:** During a physical examination the piriformis muscle is tender. Stretching the muscle will often cause a painful reaction. The neurologic exam is usually normal. Symptoms of piriformis syndrome can be similar to symptoms for spinal disorders that affect the sciatic nerve such as a ruptured disk. X-ray studies of the spine such as a CT scan and a MRI are used to insure there is not a spinal pathology causing the pain. MRI scanning of the piriformis area itself can sometimes show enlargement of the piriformis muscle with compression of the sciatic nerve. An injection of anesthetic medications around the piriformis muscle and sciatic nerve helps confirm the diagnosis. A biomechanical screen performed by the physical therapist can also help confirm the diagnosis.

**Treatment:** Many patients will find relief from the pain with injection therapy around the piriformis muscle and sciatic nerve. Physical therapy is also very important in treating this syndrome. Patients with piriformis syndrome will be asked to perform exercises to stretch and condition the large muscles in the gluteal region. This will help reduce the number of muscle spasms and irritation of the connective tissue around the sciatic nerve. For some patients the use of behavioral therapy, including biofeedback techniques, helps control some of the excess muscle irritability and reduces the pain. This permits the patient to progress more efficiently through their course of physical therapy. In extreme cases of piriformis syndrome, surgery is considered, but only after conservative measures have failed.