Anatomy: Anatomically, the piriformis muscle lies deep to the gluteal muscles. It originates from the sacral spine and attaches to the greater trochanter of the femur. The sciatic nerve usually passes underneath the piriformis muscle, but in approximately 15% of the population, it travels through the muscle. The piriformis muscle assists in abducting and laterally rotating the thigh.

Causes/Mechanism of Injury
- Patients with the nerve passing through the muscle are particularly predisposed to this condition.
- Trauma to the buttock
- Overuse
- Leg length discrepancy
- Fibrosis after an injection in the buttock
- Abnormal gait
- SI dysfunction
- Sitting with wallet in pocket
- Femoral head anteversion
- Poor lower extremity biomechanics

Symptoms: The piriformis syndrome is a condition in which the piriformis muscle irritates the sciatic nerve, causing pain in the buttocks and referring pain along the course of the sciatic nerve. This referred pain, called "sciatica", often goes down the back of the thigh and/or into the lower back. Patients generally complain of pain deep in the buttocks, which is made worse by sitting, climbing stairs, or performing squats. Other common symptoms include gluteal atrophy and spontaneous fasciculations of the muscles of the calf, buttock, and hamstrings.

Treatment/Management: Conservative treatment includes piriformis stretching, which aims to correct the underlying pathology by relaxing a tight piriformis, and related muscle stretching to relieve nerve compression. Because the piriformis lies deep in the gluteus maximus, using moist heat or ultrasound prior to stretching is most often suggested. Stretches can be performed in both the standing and supine positions, and they involve hip and knee flexion, hip adduction, and internal rotation of the thigh. This may take some time to increase tolerance, as this is the same position used to provoke piriformis pain. Various therapeutic injections may be considered, including local anesthetic, corticosteroid, or Botox.

Common Physical Therapy Treatments
- Stretching hip musculature
- Strengthening hip musculature
- Ice/heat to decrease symptoms
- Ultrasound to increase extensibility
- Mobilization of Sacroiliac region and hip
- Neural mobilization
- PNF using contract/relax technique
- Myofascial release technique
- Orthotics

Exercises
Exercises for Piriformis Syndrome focus on stretching and strengthening the hip musculature.