

When Running Is A Pain In The Butt

By Ted L. Forcum

There are many times that running may become a pain in the butt. I mean that not in a sarcastic sense—since fall and winter are on the horizon, it is more difficult to persuade the old body to jump out in the cold weather. I am talking about injuries that present themselves in the gluteal region. There are several of these injuries common to runners. We will take a brief overview of the four most common injuries to these areas, starting with piriformis syndrome.

The piriformis muscle is a relatively small, yet highly significant muscle that lies underneath the gluteal muscles. Its primary function is to rotate the hip externally causing the foot to toe out. Spasms or contractures in this muscle may cause the person to toe out while walking or running and can actually cause increased pronation.

There are two features that make the piriformis muscle a highly significant structure, one being that the muscle crosses two joints. Any muscle that crosses two joints has a higher risk of injury. This is shown virtually throughout the body. The piriformis muscle originates on the inner surface of the sacrum and courses deeply through the gluteal tissues to insert onto the greater trochanter, outer portion of the hip.

The fact that it crosses two joints means that the muscle has to stabilize and control both joints simultaneously. This creates a greater amount of work for the muscle in comparison with other muscles in the area.

Another significant feature of the piriformis muscle is that the sciatic nerve crosses underneath the belly of the muscle. In fifteen to twenty percent of the population, the sciatic nerve actually splits right through the belly of the muscle. The sciatic nerve, the largest in the body, runs from the pelvis down through the back of the leg. If tension and inflammation develop around the piriformis muscle, the sciatic nerve may become compressed and irritated, creating an all too common syndrome known as sciatica, which is pain coursing down the back of the leg following the sciatic nerve.

Treatment for piriformis syndrome is multifaceted. First it is important to find out if there is a biomechanical cause to this ailment. If there is, treatment may consist of the use of foot orthotics to limit rotation of the leg which the piriformis muscle tries to control. As the piriformis muscle crosses the two joints, not only the hip but the sacroiliac joint, it is important to take a look at the lower back to determine if there are any lesions in the sacroiliac joint. If joint dysfunction is present, manipulation is indicated. Massage, stretching and ice after exercise will be a great benefit.

The second common ailment to the gluteal region is actually an injury to the hamstrings muscle where the hamstrings originate from the ischial tuberosity just underneath the gluteal fold (figure 1). The ischial tuberosity is the region that most of us sit on all day. If tension is developed across the hamstrings frequently, there will be a micro-tearing or disruption of what are called tenoperiosteal fibers, the tissue connecting the tendon of the muscle to the bone. Uncoordinated function or excessive tension from the hamstrings muscles may cause this region to become inflamed and slightly torn.

The hamstrings also cross two joints. They help provide flexion of the knee and extension at the hip, making them vulnerable to injury. Treatment for this injury will vary depending upon its original cause. Frequently this injury occurs as a result of

instability within the knee joint. Other causes may be a dysfunction within the hip or sacroiliac joints, in which case manipulation may be an effective treatment. Once again, stretching, massage, and ice after exercise will be important factors.

The third common ailment is a lesion of the sacroiliac joint. A sacroiliac joint dysfunction may cause pain or numbness within the region of the affected joint and gluteal region. Lesions or dysfunction of the sacroiliac joint may be the result of posture, over-pronation, or trauma. Problems occur when the joint fails to function through its normal range of motion. Swelling and tension begin to occur within the joint creating pain and frequently a phenomenon known as referred pain. Referred pain sends pain to an area away from the site of an injury. Treatment consists of manipulation and mobilization of the sacroiliac joint to restore normal joint function and range of motion. Physiotherapy modalities such as ultrasound and interferential (electrical stimulation) may also be beneficial.

The fourth pain in the butt to runners is a condition known as trochanteric bursitis, an inflammation of the bursa around the backside of the hip. This condition is more common in women primarily because of the pelvis design. It commonly forms in conjunction with the piriformis syndrome and iliotibial band friction syndrome. The bursa on the backside of the hip becomes inflamed as a result of either direct trauma to the hip or chronic irritation from muscular tension overlying the bursa.

Treatment for trochanteric bursitis will usually consist of some form of massage to the muscles around the hip to reduce tension across the bursa. Manipulation of the hip and sacroiliac joints may also help to relieve tension. Icing and alternating hot and cold treatments are extremely important for reduction of inflammation. In acute cases anti-inflammatory medication may be necessary.

All four of these conditions, if left untreated, can be stubborn and turn into a chronic condition. If caught early, treatment for these conditions is much more successful. If running for you becomes a pain in the butt, be sure to take care of the problem as soon as you notice it. Frequently, the above conditions become a vicious cycle, one condition causing the other and the other making the first worse. This makes the entire problem a real pain in the butt to get rid of.