"Injury Prevention" By Dave Ochsendorf, MPT and Kristy Ochsendorf, DPT Tips to Prevent and Manage Hip Pain

In our last article, we discussed some effective exercises for pain in the front of the knee. This month's column will address common sources of *hip pain* in runners and some appropriate exercises to treat the pain. Pain along the outside of the hip is often referred to as **trochanteric bursitis** or greater trochanteric pain syndrome. This condition refers to inflammation of the bursa or tendons from friction on the bony prominence known as your greater trochanter. Pain in the buttock region can come from a number of sources, but in runners is commonly referred to as **piriformis syndrome**. The piriformis muscle is a small hip rotator which lies underneath the larger gluteal muscles. It produces pain when it becomes tight and inflamed. And the final common hip/knee injury to cover is **IT Band Syndrome** (ITB stands for iliotibial band). Very common in runners, this tight band along the outside of the thigh and knee produces acute pain each time you bend your knee while running. It may even "snap" back and forth over the bone on the outside of the knee. These are 3 very different conditions that can be addressed in similar ways.

These problems are often linked to weakness in the hip abductor and external rotator muscles. Hip abductor muscles, most notably the gluteus medius, are responsible for moving your leg away from your body, out to the side. These muscles play a key role in stabilizing the hips while running. When weak, the thigh will rotate inward excessively and cause the knee to cross midline, moving towards the other knee. When this occurs, the smaller accessory muscles of the hips attempt to compensate and become overworked and inflamed. A recent study showed that a 6-week gluteus medius strengthening program returned 22 of 24 injured runners (with ITB Syndrome) to running. The figures below illustrate a few effective gluteus medius exercises. Perform these exercises until fatigued without reproducing your pain 2-3 times per week.

The muscles, tendons, and fascial bands associated with these conditions are difficult to stretch and often respond better to massage or "myofascial release". Several techniques are effective to release these tight tissues, such as rolling them with "The Stick" or a foam roller. An example of foam roller use on the ITB and piriformis is shown below. Find a tender point in the muscle or band and apply pressure for up to 30 seconds. Work for a total of 5-10 minutes.

Other potential causes of these conditions can be related to changes in training, footwear, or running on uneven surfaces. Additionally, excessive foot or ankle pronation, pelvic dysfunction, or leg length discrepancy may be implicated. These issues are more complicated and will require intervention and guidance from a medical professional. Tightness in various hip muscles can be a contributing factor as well, but our most common finding with hip syndromes is **gluteal weakness**. So work those BUNS to strengthen your gluteus maximus AND medius!

