INJURY OF THE MONTH: PIRIFORMIS SYNDROME or OH MY ACHING BUTT

This month let's move up. Enough about the legs already; let's move on to the butt. A nasty injury that plagues many runners is piriformis syndrome, an ache you can easily point to in the middle of the buttocks, sometimes with radiating pain down the back of the leg. Although piriformis syndrome implies sciatic nerve involvement, that isn't always the case. The piriformis muscle moves the hips laterally to the side; picture a dancer standing with her toes pointed toward the side walls. It is also a principal stabilizer of the hip joint, and in that function we runners overuse piriformis on successions of long runs.

ANATOMY: The piriformis muscle is strong and thick, running from the sacrum (tailbone) horizontally toward the very top of the leg in the hip socket. The gluteal muscles lie over it, and the sciatic nerve follows a path either behind or right through piriformis. For this reason, when the piriformis muscle contracts in spasm- pain, numbress or tingling can radiate down the leg following the path of the sciatic nerve.

CAUSES: Besides overuse from running, stair-climbing or squats, postural concerns can overwork piriformis. Pronation (flat feet), lordosis (sway back) and pregnancy call on piriformis to stabilize the pelvis; sitting for long periods while driving or working act to shorten piriformis. An easily remedied priformis aggravation comes from sitting on your wallet in a back pocket. In addition to arthritis in the hip, trauma from a fall or car accident can inflame piriformis, the resulting scar tissue and adhesions creating ongoing pain and discomfort.

WHAT TO DO: To alleviate the syndrome, you must first decide what caused it. Look at the above suggestions and consider them. Pronation can be corrected with orthotics prescribed by your podiatrist or physical therapist. Orthotics may also help with sway back and better support your feet while pregnant. If orthotics aren't indicated, more supportive shoes may be the answer. Whenever driving or sitting for long periods, the key to overall comfort and health is to move as often as reasonable. Standing and walking for as little as a minute every two hours will allow the spine to realign and the flexed muscles to relax.

After you've determined the cause, you may want to seek appropriate professional care. Your medical doctor can rule out disc and spine conditions and prescribe muscle relaxants, physical therapy and massage. Your physical therapist may show you exercises and stretches to alleviate the contracted muscle. Massage therapy will focus on manual therapy to relax not only the piriformis muscle, but also the surrounding muscles including the hamstrings and other muscles of the low back. Massage will also reduce scar tissue formation and existing adhesions. Sports massage will often include stretching and strengthening exercises. Chiropractic care might re-align the spine and the sacro-iliac, allowing the muscles being pulled by the rotated vertebra or joint, including piriformis, to relax.

HOME CARE: In addition to the earlier suggestions to avoid sitting for prolonged periods and examining your posture, also look at your sleep position. Sleeping on your stomach and on your back can exaggerate the curve to the low back. Sleeping on your side with a pillow between your legs (or well supported by spooning with your partner) helps to keep your hips stacked one on top of the other, releasing the involved muscles.

Contrast applications of heat and ice are effective treatments to increase circulation, bringing in oxygen and nutrients and flushing wastes. Try ten minutes of ice, then heat, repeated and always finishing with ice.

To relieve a piriformis spasm, lay face up on the floor with a soft tennis ball under your butt right at the area of tension. Hold that position until the muscle "melts". If you feel numbress or tingling down your leg, stop the activity as you are compressing the sciatic nerve.

A good stretch is accomplished by lying face up with a rope around the affected foot which is raised in the air, the ends of the rope held in the opposite hand. Let the leg fall, with straight knee, down toward the opposite hip, keeping both hips on the ground. Assist the stretch with your rope. Hold for a few seconds then repeat the full range of motion. Another stretch starts laying down, feet on the floor, knees bent. Put the ankle of the affected hip on the opposite knee. Clasp your hands under that opposite knee and pull the knee (with the other leg on top of it) toward your chest.

WHAT ABOUT RUNNING? That's a tough one. Rule out disc involvement! If the problem is muscular, take a few days off while you try some of the above suggestions to ameliorate the pain. Warm up well, then stretch well, then run a little, walk a little, run some more. Stretch well afterwards and use ice. Wait two days. See if you've exacerbated the condition. If not, run more and walk less. Take it slow; you don't want to be side-lined for longer than you need by being too anxious.

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My training as a therapeutic massage therapist includes ongoing study in anatomy and physiology, pathology and clinical practice.

Please send me feedback on this series. Do you want more info than I offered? Do you want more case history? Less? Do you have an injury you're curious about? Let me know at <u>BobbiVT2PA@aol.com</u>