INJURY OF THE MONTH: MUSCLE STRAINS

Welcome to this second column of good cheer enlightening you about common running injuries. I've selected muscle strains to discuss in April, the month we go back to track and racing and increasing our distances. To offer that subjective viewpoint, the muscle in question will be the quadricep, which I strained last fall. Please learn from my mistakes! Each month I will describe the symptoms, suggest the causes, and offer suggestions for healing including professional and home care.

A strain is an overstretch injury to a muscle or its tendon. It can occur from trauma, as in a fall or a car accident when your muscle is forced into a stretch, or from overuse such as too many hard workouts without adequate recovery or pushing harder and longer in a race than your training permits. Improper warm-up, muscle imbalance and inflexibility can all contribute to one's susceptibility to a muscle strain.

The symptom of a minor strain (grade 1strain) is discomfort at the injury site during activity. If you've torn some muscle fibers (grade 2 strain), you may have swelling, bruising, heat and tenderness at the site of injury. Moderate pain with activity and loss of strength are also present. With a rupture or more severe tearing (grade 3 strain), you will experience severe pain, swelling, bruising and heat, with loss of strength and loss of range of motion.

When you first notice pain or tenderness, the treatment is RICE: Rest, Ice, Compression, Elevation. Evaluate your training. Did you do too much too soon? And the big question is: Should I take time off from running? Basically, yes. For a grade 1 strain, I recommend a couple days off, then an easy run to see how it feels. With a grade 2 strain, take, maybe, a week off, then try an easy run. If you keep running through soft tissue (muscle, tendon, ligament) pain, you will re-tear the adhesions (scar tissue) and impede the muscle from healing properly. With a grade 3 strain, walking will be difficult and you should seek early medical advice. Two years ago, I tore some muscle fibers in my quadricep while racing downhill, a particularly taxing movement for that muscle. I chose to continue easy runs while my strained quad healed. Even with no speed training, no hill running, and daily massage to alleviate internal scarring (adhesions), it took almost 3 months for complete healing. Had I stopped running for 2 or 3 weeks and weight trained to address any muscle imbalances, resting the guad, I could have gone back to racing that season. I chose easy runs rather than the time off. Last summer I strained the other quad (obvious muscle imbalance?) while training for the Portland marathon by increasing my long run distance too soon. I was scheduled to run 17 miles, but I felt great and ran 20. Stupid, I knew that at the time. The next weekend I biked 40+ miles, much longer than my usual ride and not exactly a quad rest, then I ran 17 the next day. Really stupid. I knew I was in trouble, but I made the choice to run one more 20 and then my marathon on my strained quad. I wanted to run that marathon, I did, and I paid the price. I ended up with a stress fracture of the femur and almost 2 months of no running.

What treatment plan is indicated beyond a few days of RICE and rest? See your primary care or othopaedic physician to assess the damage. S/he may recommend NSAID's (Motrin or Naproxin), ice and rest; s/he may prescribe muscle relaxants and support (taping, wrapping, crutches); s/he may recommend surgery to repair the ruptured muscle. A physical therapist may address muscle imbalance and prescribe exercises for the associated muscles; s/he may suggest range of motion exercise for the damaged muscle to avoid shortening; s/he may use electric stimulation to bring blood and healing to the injured tissue. Your sports massage therapist will address the surrounding muscles which will tighten to protect the injury; s/he will address the developing adhesions (scar tissue) to alleviate loss of strength and flexibility; s/he will assist with range of motion stretching.

Home treatment includes RICE (rest, ice, compression, elevation), NSAIDS like Advil, and instruction from your health care provider including exercises, stretches and massage to the affected area. I would advise you to avoid stretching injured tissue unless it's warmed up. Really consider where you are in your training and what it means to take a little time off from running now, instead of much more later.

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My training as a therapeutic and sports 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>