

Treating Running Injuries

Evaluating strength and range of motion is key to rehabilitating an injury. I recommend starting with conservative therapy (massage, physical therapy, stretching, & strengthening) before injections or surgical procedures. MRIs are often helpful, but they sometimes fail to expose the source of an injury and/or reveal “damage” that is unrelated to the source of the pain. If you don’t start getting better in a few weeks, you can always take more aggressive measures then.

That said, there is a lot you can do on your own to try and rehab a running injury. I’ve listed some common injuries and potential self-treatments below. When possible, it is important to resolve an injury or chronic pain, rather than learn to adapt to it- and sooner is better than later, so you don’t develop bad running habits that will lead to future injuries! Also, don’t be content with eliminating the pain, but try to understand and correct the underlying issue that led to your injury- it is almost always related to inefficient running form due to muscle imbalances and/or bad habits. And, if all else fails and you really do have a structural limitation that can’t be resolved (or requires surgery), don’t despair! Many people can return to pain-free running even after surgery and joint replacement!

Common Injuries:

- Plantar Fasciitis (now called fasciosis), is not inflammatory (don’t get steroid shots!), but is actually tissue degradation, usually caused by weak foot muscles failing to support your arch. Heat, stretching, and massage can help. Also strengthen your arch muscles and make sure you don’t over-stride when running. Moving to flatter (no heel) shoes can help in the long run.
- Shin Splints are usually due to the front lower leg muscle separating from the tibia, due to excessive impact and heel-striking. By running at >175 steps/min, you shorten your stride length and reduce that impact. Moving to flatter shoes can help, and try to relax and hit the ground with your mid foot.
- Ankle Sprains are more likely with higher stack height shoes with thicker heels- being closer to the ground reduces the chances of “falling off” your shoe. Running on trails can improve your balance to reduce the chances of sprains. If you sprain your ankle, immediately start mobilizing it, massage and stretch the outer leg muscle below the knee, and try to put weight on it and return to walking and easy running as soon as possible while avoiding sharp pain.
- Knee Pain is almost always due to a problem in the hip or foot, causing pressure on or bad tracking of the knee. When you run, your foot should point forward and your knee track over the center of your foot (no wobble or collapsing inward). In addition to working on your form and mobilizing the hip and ankle, focus on loosening the outer quad a few inches above the knee.
- Calf Cramps can be related to running on your toes, increasing your running intensity, or wearing shoes with high heels (which shortens the Achilles tendon). Straight and bent knee calf stretches increase mobility. Also push into any sore areas (sit cross-legged, with your ankle on your knee) and repeatedly flex and extend your ankle. To strengthen your calf, come up on your toes using both legs, and then stand on one foot and slowly lower your heel towards the ground (or slightly lower, if standing on a step). Do LOTS of repetitions, while holding the arch in good form.
- Achilles Tendons (and any injured tendons) heal best under load. Taking time off can slow the healing process and allow the regenerating fibers to line up in the wrong direction to best support full load. The first step in treatment is to loosen its muscle belly to reduce the tension on the tendon. Then pinch any sore spot along the tendon while flexing your foot back and forth- the irritation causes inflammation which stimulates collagen production to help heal the tendon. Finally, perform eccentric contraction exercises, where you contract and then slowly lengthen the muscle with the tendon under reasonable heavy load.
- Glute Pain is usually due to muscle weakness, often from tight hip flexors (from too much sitting). You don’t need to stretch your glutes! Instead, ease their spasms by laying on your back/side with a tennis ball on the sorest spot, bend your knee, and repeatedly raise your knee (with foot staying on

the ground) until the pain eases. More importantly, strengthen your glutes! Try clam shells, side-lying leg lifts, and walking back and forth with a stretch band around your ankles.

- Tight Hamstrings usually occur when tight hip flexors pull and tilt the pelvis forward, tugging up on the hamstrings. Stretching the hip flexors provides relief, as does strengthening the hamstrings. To relieve pain, you can also sit on a hard chair with a ball under the sore part of your hamstring and flex your knee back and forth until the pain eases. Keep in mind that tight hamstrings can help you run more efficiently, as long as they aren't causing you pain!

Self-Treatment Techniques: Here are some things you can do at home to help relax and strengthen various muscles, fascia, and joint capsules:

- Pin & Move (for tight fascia & muscles): Push into the sorest part of the muscle and move back and forth where you feel pain and pulling through the area. Use enough pressure to feel discomfort, but not so much to make you "fight" the eventual relaxation of the muscle. More frequent, less pressure can work just as well as deep pressure. The pain should ALWAYS decrease as you treat the area- if the pain starts to increase, STOP! It is possible that you are on a nerve or bone.
- Pin & Strip (for tight fascia & muscles): Start with the muscle in its shortened position and press below the sore area with your fingers while you stretch the muscle, letting your fingers slide through the sore area. This will help the muscle to relax and lengthen.
- Stretching Cycles (for fascia & muscles): Gentle, short duration (4-5 sec) stretches can help relieve a muscle spasm. Relax and stretch during your exhale, stop the stretch, and repeat many times. Vary the angle of your stretch to treat the sorest area.
- Massage Trigger Points (for referred pain): Sometimes a tight muscle or "trigger point" can refer pain to other areas of your body. There are on-line resources that show you the points that may be causing your pain. Rub, poke, or roll on these points (while wiggling around, if possible), and see if it alleviates your pain. I used to get pain under my shoulder blade that could be relieved by treating either a spot in my traps or the side of my ribs!
- Deep Frictioning (for tendons): Tendon injuries respond to deep frictioning to stimulate the production of collagen to help rebuild the fibers in the tendon. Use your finger, knuckle, or tool to rub across and along the tendon in order to irritate it- but use some lubrication to avoid hurting your skin. Immediately afterwards and periodically throughout the day, do some eccentric exercises to keep the fibers aligning in the proper direction.
- Strengthening is the best strategy for dealing with weak muscles! Runners who sit a lot (or who sat a lot for years) tend to have weak hamstrings and glutes (and often have weak foot muscles, especially if they wear orthotics and/or thick, inflexible shoes). Try strengthening (instead of stretching) to resolve issues with these muscles... just make sure you use proper form to target the problem areas and not create new problems!

Summary: My web site has lots of self-treatment technique. After an injury, mobilize ASAP. Progress to resistance exercises, active drills, walking, walking up-hill, and finally running for short distances (in perfect form!). Progress at a rate that you can tolerate! Everyone is different, but you should definitely be making progress in a couple weeks... if not, change your approach! ***Finally, after you return to running, focus on improving your form or training routine so you won't get injured again!!!***



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