

Common Running Injuries:

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It's that nagging pain that just won't go away, no matter how slow you run. Or it's a new pain that is getting progressively worse. Or something just doesn't feel right! You're a runner, you know your body, and pain is the end result of something that's been building up for a while- your body is sending you a signal! Listen to it! Running, due to its repetitive nature, can create overuse injuries that require assessment and treatment by a sports-based healthcare practitioner. Here are some of the most common running injuries seen among us mileage junkies!

1. Shin splints.

Depending on what structures are involved, shin splints can be divided into three categories: "medial tibial stress syndrome", "posterior tibial syndrome", and "tibial stress syndrome". These conditions create pain along the edges of the biggest bone in your lower leg, the tibia, due to the repetitive tugging of muscles on different areas of the bone. Shin splints can often be attributed to a sudden increase in training volume or intensity, such as the addition of hill training or a significant increase in weekly mileage. Excessive foot pronation, or arch flattening, is often a mechanical culprit, placing abnormal stresses on the muscles of the lower leg. A gait assessment and biomechanical examination will help to locate the source of the problem, and treatment may include training modifications, footwear alterations, manual therapy, active stretching/strengthening, ice, and therapeutic modalities.

2. Achilles tendonosis.

The Achilles tendon is the largest tendon in the body, attaching the calf muscles, gastrocnemius and soleus, into the heel bone. When the tendon becomes damaged, tendonosis develops, and when accompanied by inflammation, the condition can be termed tendonitis. Again, a biomechanical analysis can help to determine the root of the problem, which can stem from muscular imbalances further up the kinetic chain, involving the pelvis, hips, knees, and ankles. Commonly associated with Achilles tendon problems are weakness

and/or tightness of calf musculature. Favorable results were demonstrated in a 2004 study in the British Journal of Sports Medicine through eccentric strength training. By lengthening the calf muscle complex during contraction, a time that is particularly susceptible to injury, it is thought that the risk of further injury may be decreased.

3. Plantar fasciitis/fasciosis.

Are the first few steps when you get out of bed in the morning your most painful of the day? Does the pain on the bottom of your foot improve once you begin to move around, only to return following periods of prolonged sitting? If this is the case, the chances are good that you are having a problem with your plantar fascia. The plantar fascia is a thickening of dense fibrous tissue, attaching from the bottom of the heel and travelling along the sole of the foot. Plantar fascia problems usually build up over a period of time and can implicate other soft tissues within the kinetic chain. If your plantar fascia pain causes changes in the way you walk or run, you may develop problems in your ankles, knees, hips, and low back. This condition can be due to several factors, including improper footwear, prolonged standing (or running!) on hard surfaces, and tight calf muscles. Treatment will vary depending upon the original mechanism of injury.

4. Iliotibial band syndrome.

The iliotibial band, or ITB, is a thickening of fascia found along the outside of the thigh, attaching both at the pelvis and below the knee. Because the ITB crosses both the hip and the knee joints, it is termed bi-articular, and is more prone to injury than mono-articular soft tissue structures. Typically, ITB syndrome manifests as pain felt on the outside of the knee, beside the kneecap, and the pain may only begin after running for a predictable period of time. The pain is usually worse with downhill running or walking downstairs. The ITB naturally slides over a bony outgrowth on the outside edge of your lower thigh bone with every stride, and recent research suggests that it is not only frictional forces, but inflammation within the fluid-filled sac, or bursa, underneath the ITB that contributes to the pain sensation. Risk factors for ITB syndrome can include overpronation, oversupination, overstriding, running on sloped surfaces, leg length discrepancies, and muscular imbalances.

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5. “Runner’s knee”

“Runner’s knee” is a blanket term that used to categorize many types of knee injuries. The most common diagnoses referred to as “runner’s knee” are chondromalacia patella (damage to the cartilage that lines the posterior surface of the kneecap) and patellofemoral pain syndrome (a problem with the movement of the knee cap within the groove on the anterior thigh bone). Both of these conditions may have associated grinding, cracking, or swelling of the knee, and the pain is often worsened with jumping, squatting, or hill running. Most commonly, these problems are due to muscular imbalances within the lower limb and can often be corrected by stretching and strengthening appropriate muscles.

Running’s many benefits, including improved cardiovascular functioning, blood pressure, bone density, immune functioning, weight management, mental alertness, and reduced risk of stroke and heart disease, far outweigh its risk of injury. However, in the event that you do suffer an injury, seek appropriate treatment to avoid developing a chronic problem!

Happy training!