Running Injuries

Running is a common form of exercise and recreation in the United States.

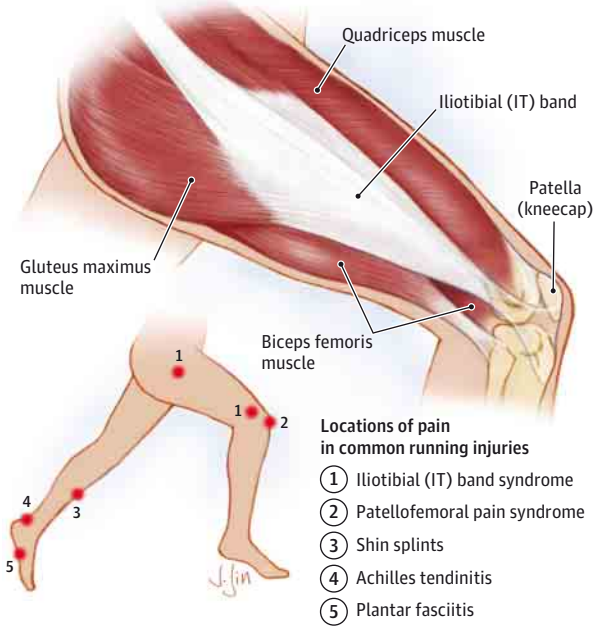
More than 40 million people in the United States run regularly. Although there are many health benefits from running regularly, there is also a risk of injury. Injuries from running usually involve the muscles, tendons, joints, and bones of the legs. Most are due to repetitive activity rather than a single traumatic event.

Common Running Injuries and Symptoms

Knee pain is the most common symptom of injury in runners. The most common cause of knee pain in runners is **patellofemoral pain syndrome**. The hallmark of this syndrome is the gradual onset of pain in the front of the knee, near the kneecap. The pain is worse after sitting for a long time or when going up and down stairs or hills. Another cause of knee pain is **iliotibial band syndrome**, which affects the outside of the knee and can travel up the outer side of the thigh to the hip.

Other common injuries in runners include **medial tibial stress syndrome**, also known as "**shin splints**." This causes pain over the shins and is more common in beginning runners. Long-distance runners can get **stress fractures**, small fractures of the bone that result from repeated "stress" on the bone, most often in the lower leg, hip, or foot. Other foot problems include **Achilles tendinitis** and **plantar fasciitis.** Achilles tendinitis causes pain along the heel cord (Achilles tendon) at the back of the ankle, whereas plantar fasciitis causes pain at the bottom of the foot or the heel itself. Plantar fasciitis usually feels worse after a period of rest, such as in the morning just after getting out of bed.

Anatomy of the thigh and locations of common running injuries



Who Is at Risk of Running Injuries?

Certain groups of runners have a higher chance of becoming injured. These include beginning runners, runners with previous injuries, those who run more than 40 miles (65 km) a week, those who suddenly increase the speed or distance of their running, and women with low bone density (osteopenia or osteoporosis).

Decreasing Risk of Injury From Running

Every individual is different, but some general recommendations include

- If you are a beginning runner, start slowly and increase running time and distance gradually.
- Include 1 or 2 "rest days" or days spent doing other types of exercise (strength training or cross-training) each week.
- Choose a shoe that is comfortable with a proper amount of support, and change shoes every 350 to 500 miles.
- Soft surfaces (eg, treadmill, track) are better than hard surfaces (eg, concrete, asphalt).
- Although many runners like to stretch before or after running, stretching has not been shown to reduce injuries.

Treatment

The most important treatment for running injuries is rest, or changing activities, to allow for healing. Other treatments include ice, special devices such as splints or orthotics, and pain relievers such as nonsteroidal anti-inflammatory drugs. Physical therapy can also help for more serious injuries. Surgery is rarely needed.

If you have pain while running that lasts for more than a few days or is severe enough to make you stop running, see your doctor. Do not try to push through the pain.

FOR MORE INFORMATION

- American Orthopaedic Society for Sports Medicine *www.sportsmed.org*

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Source: Brown CR Jr. Common injuries from running. In: Imboden JB, Hellmann DB, Stone JH, eds. *Current Diagnosis & Treatment: Rheumatology*. 3rd ed. New York, NY: McGraw-Hill; 2013:chap 72.

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