

Ankle Sprains in Youth

Ankle sprains are among the most common injuries experienced by young athletes.

A sprain is a type of injury in which the ligaments that connect bones together are partially or completely torn. There are several ligaments in the ankle that can be injured, but by far the most common are the ligaments that connect the fibula (shin bone), calcaneus (heel bone), and talus (foot bone). These ligaments are on the outside of the ankle. Less commonly, the ligaments on the inside of the ankle can be torn.

In general, injuries to all of these ligaments (including complete tears) heal quickly on their own. However, there are some treatments that can improve comfort and might speed recovery.

First, it is important to protect the joint from further injury. When the ligaments that stabilize the ankle are torn, it is easy to reinjure the ankle and cause worse damage. In general, if a young athlete cannot run, jump, and change direction without limping, they should not participate in sports.

Second, it is helpful to work on maintaining the range of motion of the ankle, even soon after the injury. We used to think that immobilization with a brace or a cast helped ankle sprains heal more quickly, but this turned out not to be true. Today, we ask athletes to start gently working on range of motion right away. A common exercise involves writing the alphabet in the air with one's toes.

Third, there are several treatments that help treat pain, swelling, and bruising after an ankle sprain, even if they don't speed recovery. These include (1) ice, (2) compression by wrapping the ankle tightly, (3) elevation by keeping the ankle up (for example by propping it on pillows when lying down), and (4) over-the-counter pain medications, such as ibuprofen, and can all decrease the uncomfortable symptoms of an ankle sprain.

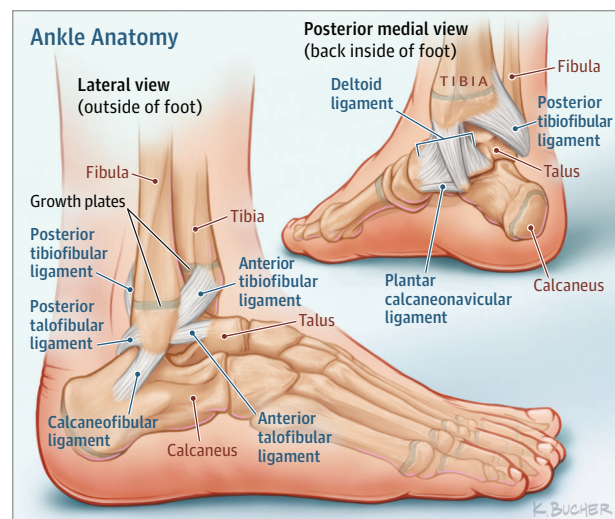
Finally, rehabilitation is an important part of the recovery process. Ankle strength, range of motion, and position sense all recover more quickly with a good physical therapy program. In addition, the physical therapist (or athletic trainer or other appropriate health care professional) can often help guide when a youth can return to sport. For running sports, it is common to use a running program that progresses the athlete through walking, jogging, faster running, starts and stops, and hard cutting /pivoting /changing direction. Completing physical therapy and a running program can help ensure that the athlete returns to sport as safely as possible and decreases risk of reinjury.

Some ankle sprains are more severe than the injuries described above. Occasionally, the ligaments that hold the tibia and fibula together can be torn. These are called high ankle sprains. Regular ankle sprains and high ankle sprains can be distinguished on physi-

cal examination and with standing (weight-bearing) x-ray imaging, although occasionally magnetic resonance imaging is needed to determine how severe an injury is and/or plan for surgery.

In young children whose growth plates are not yet closed, the bone could break instead of a ligament tear. Usually physical examination will detect this, but occasionally x-ray imaging is necessary. However, not all ankle sprains need to undergo x-ray imaging to determine if there is a fracture; your health care professional will be able to tell based on physical examination if there is a high risk for fracture.

Ankle sprains are common injuries in active young people. Most of these injuries recovery quickly on their own, do not require imaging, and do better with early motion and rehabilitation. High ankle sprains and fractures are much less common but more serious. They may require imaging and more treatment.



FOR MORE INFORMATION

Read more from Healthy Children on ankle rehabilitation:
<https://www.healthychildren.org/English/health-issues/injuries-emergencies/sports-injuries/Pages/Ankle-Sprain-Treatment.aspx>

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