



The American Orthopaedic
Society for Sports Medicine

SPORTS TIP

Tendonitis

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What is tendonitis?

Tendons connect muscle to bone. They function to transmit muscle contraction forces to the skeleton, creating movement of that body part. Tendonitis is inflammation of the tendon. However, most tendonitis is not actually an inflammatory process, but a degenerative process from overuse and delayed healing called tendinosis. This can begin with an acute injury, such as a fall, or can occur with repetitive activity. Actual inflammation in a tendon is unusual. Chronic tendinopathy can weaken the tendon such that it may rupture or tear with a subsequent injury.

Where does tendonitis occur?

Most tendonitis or tendinosis is described according to the body part involved. Common areas affected include the patellar tendon and Achilles tendon in runners and jumping sports, rotator cuff tendons in shoulders in overhead sports, and elbows (lateral epicondylitis) in tennis players and office workers. Middle-aged adults are most susceptible, but tendonitis or tendinopathy can occur across many age groups.

What are the symptoms of tendonitis?

Typical symptoms include pain and swelling over the tendon itself. Pain also occurs with movement at the joint next to the tendon and with moving the muscle attached to the affected tendon. (For example, moving the quadriceps muscles to elicit pain from the patellar tendon.) In most situations, the diagnosis

is clinical, based on the patient's history (description of symptoms) and examination, rather than based on imaging studies. Radiographs, ultrasound, and magnetic resonance imaging can be used in instances that the physician suspects other conditions or injuries.

How is tendonitis treated?

Treatment should include activity modification, rest, and anti-inflammatory medications initially. Ice, compression, stretching, and physical therapy may be indicated depending on the location, etiology, or cause of the problem, and duration of symptoms. Your doctor may recommend a brace or even a cast for a short period of time. Other treatment includes injection of corticosteroid or platelet-rich plasma (PRP). Cortisone decreases pain and inflammation, but may have a negative affect on tissue healing. PRP, which has growth factors, including platelet-derived growth factor, may help the healing of the affected tendon, but may take time to have its expected effect. Mechanical treatments such as taping, massage, and gradual loading of the effected tendon can also help transition from treatment to activity. Surgical procedures may be indicated in complex or refractory cases.

References:

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Sharma P, Maffulli N. Tendon injury and tendinopathy: healing and repair. *J Bone Joint Surg*. 2005;87A:187-202.