

TENDINITIS & TENOSYNOVITIS

DESCRIPTION

Painful inflammation of a tendon (tendinitis) and the lining of the tendon sheath (tenosynovitis). Inflammation of both often occur simultaneously. Normally, tendon fibers merge into muscle fibers and serves as the muscle's attachment (insertion) to bone. The typical muscle has a tendon on each end that attaches to bone and allows the force of the muscle contraction to be transmitted through the tendon to produce movement. Tendinitis may be due to microscopic or partial tearing of the tendon.

FREQUENT SIGNS AND SYMPTOMS

- Pain, tenderness, redness or bruising, and swelling in the area of injury. The severity varies with the extent of inflammation and/or injury
- Loss of normal mobility of the injured joint.
- Pain is worse with contraction of the muscle the tendon is attached to and with motion of the joint it crosses.
- Weakness in the tendon caused by calcium deposits that may accompany tendinitis.
- Most common sites include Achilles tendon, rotator cuff, patellar tendon, peroneal tendons, posterior tibial tendon, and biceps tendon

CAUSES

- Tendinitis and tenosynovitis may occur due to sudden overload of a contracted muscle, overuse, sudden increase or change in activity or strenuous athletic activity.
- Less commonly it may be a result of a direct blow.
- Poor biomechanics may also play a role.

RISK INCREASES WITH

- Trauma
- Overtraining
- Sudden change in athletic activity
- Incorrect form, mechanics or technique
- Poor physical conditioning (strength/flexibility)
- Inadequate warm-up before practice or play
- Return to activity before healing and rehabilitation and conditioning are complete.

PREVENTIVE MEASURES

- Appropriate warm-up and stretching before and after practice or competition.
- Appropriate conditioning including joint flexibility, muscle strength and endurance and cardiovascular fitness
- Strengthen weak muscles and tendons with rehabilitative exercises to prevent recurrence.
- Ice the affected tendon and sheath after activity when returning to sports
- Protective equipment when indicated for specific tendons
- Proper technique

EXPECTED OUTCOME

With appropriate treatment 6 to 8 weeks is usually needed for recovery. May take longer depending on the severity of injury.

POSSIBLE COMPLICATIONS

- Reinjury/recurrence of symptoms, permanent weakness and/or joint stiffness if the tendinitis is severe and rehabilitation is incomplete. Appropriately addressing the problem the first time decreases the frequency of recurrence.
- Delayed healing or resolution of symptoms if return to sports is attempted before rehabilitation is complete.
- Rupture of the inflamed tendon. Tendinitis is your body's way of telling you the tendon is injured and to let it recover.

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of ice and medications to relieve pain, stretching the affected joint and modification of activity to rest the injured tendon and sheath. Brace, elastic bandage wrapping, splint, cast or sling may be prescribed to protect affected joint for a short period of time. Strengthening exercises are prescribed as the tendon inflammation and pain subsides. Physical or occupational therapy may be recommended to regain strength and normal use of the joint. Surgery may be necessary if the tendinitis or tenosynovitis persists despite adequate conservative treatment and may involve removing chronically inflamed tendon lining and/or scar tissue within the tendon. Surgery may also be necessary if tendon is torn. Cortisone injections are sometimes given to reduce the inflammation of the tendon sheath or tissue around the tendon, but never into the tendon. Injections into the tendon may weaken the tendon and result in tendon rupture.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Topical ointments may be of benefit.
- Pain relievers are usually not prescribed for this condition. If your physician prescribed pain medications, use only as directed.
- Cortisone injections reduce inflammation, and anesthetics temporarily relieve pain.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF:

- Symptoms get worse or do not improve despite treatment.
- Pain becomes intolerable, numbness, tingling, or toes/ fingernails become cold, blue, gray or dusky color.
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.