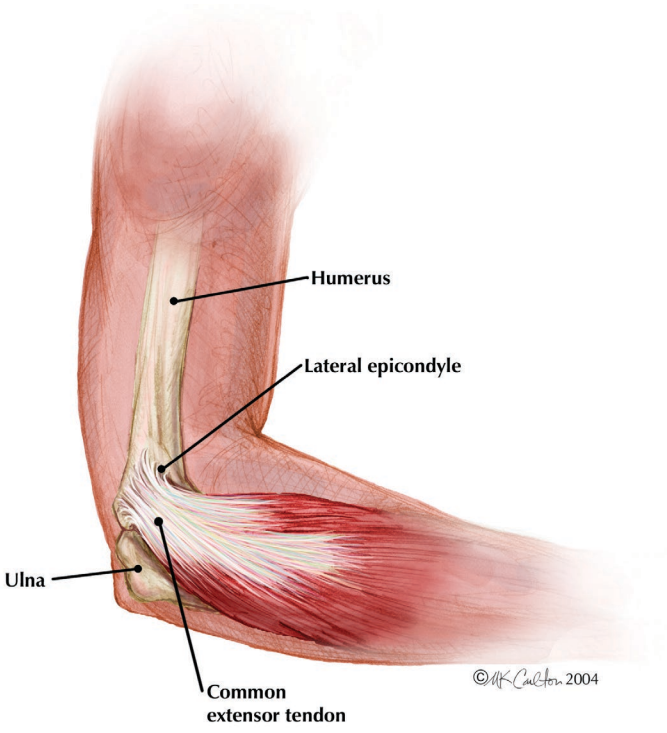
TENNIS ELBOW

Tennis elbow is a form of tendonitis that causes pain over the bony prominence called the lateral epicondyle on the outside of the elbow. It is often referred to as lateral epicondylitis.

What causes tennis elbow?

Tennis elbow is caused by repetitive stress on the muscles and tendons that are connected to the lateral epicondyle. These muscles extend along the top, or dorsal, side of the forearm to the wrist and are responsible for extending or bending back the wrist and fingers. The tendons are fibrous bands that connect the muscles to the bone, in this case the lateral epicondyle.



If too much stress is placed on these muscles and tendons, microtears can occur at the site where the tendons attach to the lateral epicondyle (see drawing). These micro tears cause pain that is usually localized at the lateral epicondyle but the pain can occasionally radiate down the forearm. Aging appears to make these tendons more prone to breakdown. Therefore, lateral epicondylitis is more common once we get in our fourth decade of life and beyond.

The pain increases with activities that require contraction of the affected muscles and tendons: shaking hands, turning doorknobs, picking up objects with the palm down, or hitting a backhand in tennis.

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How do I know if I have tennis elbow?

No special tests are needed to make the diagnosis. This diagnosis is made by history and physician examination of the patient. The patient may present symptoms consistent with tennis elbow and has pain when pressure is applied to the outside of the elbow. The patient frequently cannot remember an injury, but will have noticed the pain either at the beginning or end of an activity that requires wrist and elbow movement.

X-rays are not always required when valuating a patient with tennis elbow symptoms, but a doctor may wish to order them just to make certain that the bone structures of the elbow are normal.

How is tennis elbow treated?

Like many overuse injuries of sport, there is no sure-fire treatment. Rest itself does not necessarily cure the problem, but it may decrease the pain and allow healing to progress. Decreased activity with the elbow and wrist is generally preferred over absolute rest and complete inactivity. The healing of tennis elbow can take weeks to months.

Some physicians believe that the key to healing this overuse injury lies in increasing the circulation to the area while decreasing the tightness of the muscles. Therefore, stretching and strengthening exercises are frequently helpful.

The following exercise may help: Support the forearm on a flat surface with the wrist and hand free. Hold a 1 to 2 pound weight in the hand. Keeping the palm down, slowly extend the wrist. Bring it backward, or up, and then bend it forward, or down. The muscles on the top of the forearm should contract when the wrist is moved upward and stretch when the hand is moved downward.

To balance the forearm muscles, these exercises should be repeated with the palm facing up. Each exercise should be repeated 10 times slowly.

A loop of rubber tubing, with one end attached to a table leg or held on the floor with a foot, can be used to provide resistance instead of the weight. This will also increase circulation to the area.

A snug, but not tight, strap worn around the top of the forearm often decreases the pull of the muscles on the lateral epicondyle and lessens pain. When symptoms are present during everyday activities, the band should be worn during all waking hours. Occasionally, an elbow sleeve with a pad specially designed to put gentle pressure over the forearm muscles can be used. This sleeve has the advantage of not only changing the pull of the muscles, but keeping them warm as well, which increases their flexibility and circulation.

A physician may also prescribe ultrasound or electrical stimulation to increase circulation to the area.

Nonsteroidal anti-inflammatory medications like aspirin, ibuprofen and ketoprofen, or various prescription drugs can treat the symptoms and may decrease the pain and irritation in and around the tendon. However, it appears unlikely that these medications can actually evoke more rapid healing of the condition.

Icing the joint after activity may also decrease the irritation and relieve the pain.

If treatment with decreased activity, exercises, and medication is not effective, your physician may recommend a corticosteroid injection in the affected area. This can further decrease the pain and irritation. In some cases this is not effective and surgery can be considered for these resistant and chronic cases.

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TIPS FOR PREVENTING INJURY

- Warm up well before play. Muscles and tendons are like Silly Putty and stretch more when they are warm. Make sure to keep the muscles and tendons warm as you play.
- Choose appropriate equipment and maintain it properly. A racquet handle that is too big or too small, strung too tightly or loosely, or has a too big or too small head, may increase stress to the elbow and wrist during play.
- Condition for the activity by stretching and strengthening all the muscles used in the sport. Also evaluate play techniques to make sure that they are not irritating the condition.

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STOP SPORTS INJURIES

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