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Tennis Elbow (Lateral Epicondylitis)

ASSH

Lateral epicondylitis, commonly known as "tennis elbow," is a painful condition involving the tendons that attach to the bone on the outside (lateral) part of the elbow. Tendons transmit a muscle's force to the bone. The muscle involved in this condition, the extensor carpi radialis brevis, helps to straighten and stabilize the wrist (Figure 1).

With lateral epicondylitis, there is degeneration of the tendon's attachment, weakening the anchor site and placing greater stress on the area. This can lead to pain associated with activities in which this muscle is active, such as lifting, gripping and/or grasping. Sports such as tennis are commonly associated with this, but the problem can occur with many different activities.

Causes

This condition most commonly affects individuals between 30 and 50 years old, but it can occur in all ages and in both men and women.

Here are some potential causes of this condition:

- **Overuse**: This can be both non-work and work-related. Overuse can happen from "repetitive" gripping and grasping activities such as meat cutting, plumbing, painting, auto-mechanic work, etc.
- **Trauma**: Although less common, a direct blow to the elbow may result in swelling of the tendon that can lead to degeneration. This can make the elbow more susceptible to an overuse injury.

Signs and Symptoms

Pain is the primary reason for patients to seek medical evaluation for lateral epicondylitis. The pain is located on the outside of the elbow, over the bone region known as the lateral epicondyle. This area can become tender to the touch. Pain is also produced by any activity which places stress on the tendon, such as gripping or lifting. With activity, the pain usually starts at the elbow and may travel down the forearm to the hand. Occasionally, any motion of the elbow can be painful.

Treatment

With tennis elbow, some patients will find that their symptoms go away spontaneously within a year. For others, both surgical and non-surgical treatments are available. Non-surgical treatments will almost always be considered first.

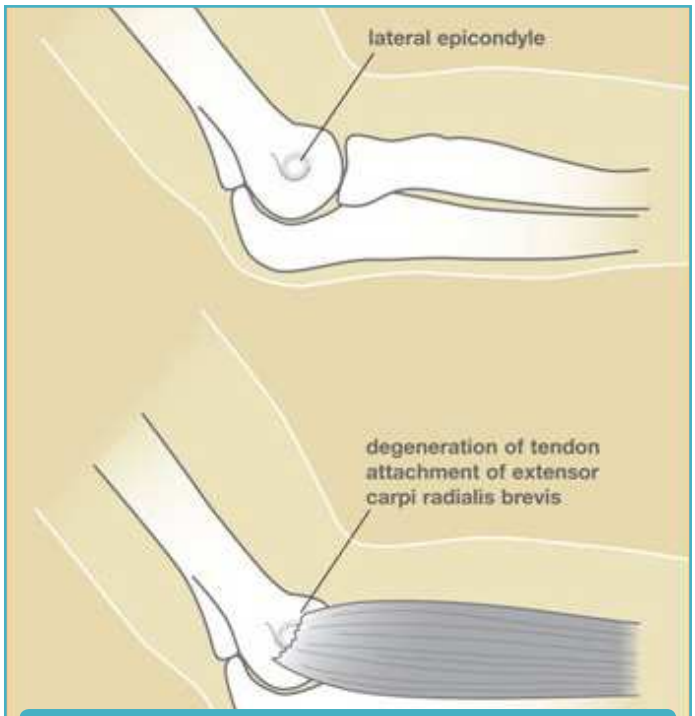

Figure 1: Example of tendon transfer

- **Medication**: Anti-inflammatory medications may help alleviate the pain.
- **Brace**: A tennis elbow brace, a band worn over the muscle of the forearm just below the elbow, can reduce the tension on the tendon and allow it to heal.
- **Physical therapy:** Stretching and/or strengthening exercises, ultrasound, or heat treatments may help the pain.
- **Steroid injections**: A steroid is a strong anti-inflammatory medication that can be injected into the area.
- **Autologous blood injections (ABI) or platelet rich plasma (PRP)**: This includes withdrawing blood from an uninjured site and reinjecting it into the area of the lateral epicondyle. This therapy is a major focus of new research and offers some promise.

Surgery is only considered when the pain is incapacitating and has not responded to other treatments, and when symptoms have lasted six to 12 months. Surgery involves removing the diseased, degenerated tendon tissue. The surgery would be performed in an outpatient setting.

These can include:

- **Activity modification**: Initially, the activity causing the condition should be limited. Modifying grips or techniques, such as use of a different size racket in tennis, may relieve the problem.

Recovery
Recovery from surgery will include physical therapy to regain motion of the arm. A strengthening program will be necessary to return to prior activities. Recovery can be expected to take several months.

Talk to your hand surgeon to determine the best treatment option for you.