

## Tennis Elbow

### Description

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Tennis Elbow is commonly used to describe pain occurring on the outside of the elbow. Pain and weakness is experienced where the extensor muscles of the forearm attach onto the lateral side (outside) of the elbow. Its correct terminology is known as “lateral epicondylagia”.



### Anatomy

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There is a small point of bone on the outside aspect of the elbow called the lateral epicondyle. This point of bone serves as an attachment point for all the small muscles that extend (curl backward) your wrist and fingers. These muscles also work to steady the wrist during any lifting activity of the hands and wrist. The lateral epicondyle has a very poor blood supply and, as the hands and wrist are used so frequently during the day, with repeated movements of the wrist and forearm this area is susceptible to microtrauma (ie small tears at the junction between the muscle and the bone).

### Causes

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Continuing micro trauma to the common extensor tendons attachment on the outside aspect of the elbow leads to swelling, further tissue damage and pain. A nerve passes through this area which can often lead to an increased sensitization or pain in either the forearm, shoulder or even the neck.

Tennis Elbow occurs as an “overuse injury” because the healing ability of the body lags behind the micro trauma being caused by repetitive movements. In effect, this creates a vicious circle of progressive muscle tearing and pain, made worse by the poor blood supply to the area. The only way to improve the condition is to break this cycle.

In general, continuing microtrauma to the area leads to swelling, further tissue damage and pain. This microtrauma may result from:

1. Sudden unaccustomed loads being applied to the arm (ie heavy gardening, painting)
2. Weakened forearm muscles – particularly the extensor muscles
3. Lack of flexibility in the wrist
4. Poor technique in sports activities (ie throwing, grip on racket)
5. Training error – too much too soon
6. Change in racket string tension

## Signs and Symptoms

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- Tenderness, abnormal warmth, and swelling over the lateral epicondyle and/or the muscles which attach to this area
- Sharp shooting pain around the elbow and forearm during movement, with constant dull, aching pain in the elbow and forearm at rest.
- Pain experienced when the elbow is straight, and when attempting to straighten fingers and/or cock wrist, with or without resistance.
- Inability to grasp or lift objects, eg saucepan, phone, book , cup.

## Treatment

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Rest, ice and appropriate pain and/or anti-inflammatory medications can be commenced immediately. A physiotherapy consultation is necessary to fully identify the cause, modify activities and provide treatment.

Physiotherapy treatment will assist in the most rapid and complete recovery and may include:

- Soft tissue massage/stretchers
- Elbow, shoulder, spinal and neural mobilizations
- Support/taping of the forearm, Icing, stretching routines
- A specific strength program (particularly the wrist extensors) to stimulate healing of damaged connective tissues without causing a further increase in pain
- Technique correction
- Education (regarding equipment
- Graduated return to work/sport programs
- Dry Needling

This condition can be slow to heal and can take up to 3-6 months to fully resolve, obviously depending on each individual's age, the extent of injury and response to treatment. Usually the longer the time since onset of pain, the longer the expected recovery. Reducing the "overuse" of the forearm extensors via work or sporting technique modifications holds the key to a long term recovery.

**Please feel free to discuss any problems or queries with your physiotherapist or get up to date treatment options by subscribing online at [www.rehabonthenet.com](http://www.rehabonthenet.com).**