

# Tennis Elbow (Lateral Epicondylitis)



**Despite its name, you don't have to be a tennis player to develop this condition—although people who suffer from tennis elbow know that this sport does increase the risk.**

**"Tennis elbow is the most common source of elbow pain."**

Tennis elbow, also known as lateral epicondylitis, is the most common cause of elbow pain. It occurs when participating in sports or work activities that require repetitive and strong grip strength.

To grab an object, whether a racket or a briefcase, with strong grip strength, the wrist has to be positioned in extension. The muscle and tendon at the center of that movement is called the extensor carpi radialis brevis (ECRB). That muscle begins at the lateral epicondyle or lateral prominence of the elbow joint.

When repetitive or strenuous gripping is performed, the origin of that muscle can be injured or torn from its attachment site on the elbow, which then leads to pain directly over the site of the injury that radiates down the back of the forearm. This problem is worsened by any activity, including shaking hands, that requires grip strength.

## Symptoms

Tennis elbow usually causes pain that starts on the outside of the elbow and moves down the forearm and into the wrist. This pain can be accompanied by weakness in the forearm and hand and may cause difficulty with:

- » Gripping an object, such as tennis racket, golf club, or briefcase
- » Turning a doorknob
- » Shaking a person's hand
- » Using dumbbells weights while working out

## Causes

The causes of tennis elbow are:

- » Repetitive use
- » Injury
- » Wear and tear over time
- » Underlying conditions like rheumatoid arthritis
- » Any activities that require repetitive gripping

Athletes are at particular risk. Though you don't need to be a tennis player to develop this condition, racket sports like tennis, pickleball, badminton, and squash do increase the risk.

Common occupational risks for tennis elbow include painting, using plumbing tools, butchering, and carrying a briefcase.

## Diagnosis

Tennis elbow is typically diagnosed by asking patients about outer elbow pain, occupation, past injuries, and risk factors, as well as a specialized physical exam.

The doctor will try to reproduce the symptoms by pressing down on the patient's wrist while they try to push up. The doctor may also press down on the fingers while the patient tries to hold the fingers straight (the piano sign). If there is pain at the

outside, or lateral edge, of the elbow during these tests, then the test indicates tennis elbow.

Dr. Romeo has done extensive research on the anatomy of the ECRB, specifically related to its footprint. He will identify the origin of the ECRB and confirm that this is the site of the patient's elbow pain.

In some cases, additional tests such as an x-ray or MRI may also be used.

## Nonsurgical treatment options

For minor cases of tennis elbow, there are many nonsurgical options available. These include anti-inflammatory medications, a brace to ease the pain, physical therapy, a cortisone injection, and orthobiologics, such as platelet-rich plasma.

Currently, therapeutic exercise has been associated with the most improvement at one year, when compared to other treatments such as injections. Because of this finding, patients may request an injection for temporary pain relief but should understand that this will not facilitate or accelerate the healing of the tendon injury.

A program to treat tennis elbow should include exercises to stretch and strengthen the muscles and tendons of the hand, wrist, forearm, and elbow.

In cases where non-surgical treatment is ineffective and the continuation of symptoms prevent the ability to perform work or sport activities, then an outpatient arthroscopic procedure may be indicated.

## How surgery is performed

Elbow arthroscopy is a minimally invasive surgery that takes less than an hour. A small cut is made on both the inside and outside of the elbow joint, and a tiny camera with a light (an arthroscope) is used



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in order to see inside the elbow joint to pinpoint injury. Another small cut is made on the outside of the elbow, and then specialized tools remove areas of tissue inflammation and damage related to the origin of the ECRB, which is the underlying case for lateral epicondylitis.

## Recovery time

Patients can go home the same day of the surgery and may move the elbow as much as they can tolerate. Resistance or strengthening activities should be avoided for approximately four weeks. During this time, patients should instead do an at-home range-of-motion program involving their hand, wrist, and elbow.

After four weeks, patients will be referred to an occupational therapist to start a rehabilitation program. An occupational therapist helps people adapt to difficulties in their day-to-day function.

## Results

Many patients will notice pain relief just a few days after the procedure. The anticipated recovery time for returning to full strength is three to four months.

In an investigation performed by Dr. Romeo, he found that patients who had an injury related to work would take three to four months to return to work. However, when the injury was not related to work, their recovery often only took six to eight weeks.

**Want to learn more?** Find relevant videos, animations, and research material related to this procedure at [romeoorthopaedics.com](http://romeoorthopaedics.com). →



*For more information about the causes and treatment of elbow tendonitis, please request an appointment with experienced Chicago orthopaedic surgeon Dr. Anthony Romeo.*

**Please visit our website to find out how to schedule your appointment.**