

Informational Guide to Lateral Epicondylitis: Tennis Elbow

Introduction

Lateral epicondylitis, commonly known as tennis elbow, is an injury of the forearm muscles where they attach to the elbow. Pain often starts on the outside bump of the elbow (lateral epicondyle). The forearm muscles that bend the wrist back (the extensors) attach on the lateral epicondyle and are connected by a common tendon. When you bend your wrist back or grip with your hand, the wrist extensor muscles contract. The contracting muscles pull on the extensor tendon. The forces that pull on these tendons can build with various daily tasks such as gripping, hitting a tennis ball in a backhand swing, painting with a brush or roller, using hand tools or a computer. These activities are not necessarily high impact, but over time can lead to injury.

Overuse through repetitive activity of the muscles and tendons of the forearm and elbow is the most common reason people develop tennis elbow. These activities are not necessarily high-level sports competition. Hammering nails, picking up heavy buckets, or pruning shrubs can all cause the pain of tennis elbow.

Stages

In the initial stage of injury, the body undergoes an inflammatory response that may or may not lead to pain. Special inflammatory cells make their way to the injured tissues to help them heal. Though these cells are initially desired, too much inflammation can be a bad thing. Use of anti-inflammatory medications and ice often resolve an acute episode of lateral epicondylitis.

If the acute stage is not properly controlled, more chronic conditions of tennis elbow may develop. Continued overuse throughout the acute stage results in wear and tear and is thought to lead to tissue degeneration. When this happens, tissue within the tendon loses its strength, becoming fragile and prone to injury. Each time the tissue breaks down, the body responds by forming scar tissue in the tendon. Eventually, the tendon becomes thickened from extra scar tissue. The scar tissue never has a chance to fully heal, leaving the injured areas weakened and painful.

Symptoms

The main symptom of tennis elbow is tenderness and pain that starts at the lateral epicondyle or outside of the elbow. The pain may spread down the forearm. The forearm muscles may also feel tight and sore. The pain usually gets worse when you bend your wrist backward, turn your palm upward, or hold something with a stiff wrist or straightened elbow. Grasping items also makes the pain worse. Just

reaching into the refrigerator to get a carton of milk can cause pain. Sometimes the elbow feels stiff and won't straighten.

Diagnosis

Your provider will first take a detailed medical history followed by a thorough medical exam. The strength and mobility of the forearm muscles will be assessed. To rule out problems such as calcium deposits on the lateral epicondyle, x-rays may be ordered. Tennis elbow symptoms are very similar to a condition called radial tunnel syndrome. If your pain does not respond to treatments for tennis elbow, your provider may suggest tests to rule out problems with the radial nerve.

Rehabilitation

Physical therapists frequently treat this problem. Several modalities such as ice, electrical stimulation, ultrasound and /or iontophoresis may be used to decrease pain and inflammation. The physical therapist may use joint mobilization or an elbow strap to take some of the load off the elbow muscles and tendons. Because tennis elbow is often linked to overuse, your therapist will work with you to reduce repeated strains on your elbow. When symptoms come from a particular sport or work activity, your therapist will observe your style and motion with the activity and discuss various ergonomic changes. Exercises are used to gradually stretch and strengthen the forearm muscles.

More Information...

For more information please contact any of our three clinics in Roseville, Spring Lake Park, or Blaine where a knowledgeable therapist will be happy to assist you with your recovery needs.