

Medial Epicondylitis (Golfer's Elbow)

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Introduction

Medial epicondylitis is commonly known as golfer's elbow.

This does not mean that only golfers have this condition. But the golf swing is a common cause of medial epicondylitis. Many other repetitive activities can also lead to golfer's elbow: throwing, chopping wood with an ax, running a chain saw, and using many types of hand tools. Any activities that stress the same forearm muscles can cause symptoms of golfer's elbow.

This guide will help you understand

- what parts of the elbow are affected
- what causes golfer's elbow
- how to make the pain go away

Anatomy

What parts of the elbow are affected?

Golfer's elbow causes pain that starts on the inside bump of the elbow, the medial epicondyle. Wrist flexors are the muscles of the forearm that pull the hand forward. The wrist flexors are on the palm side of the forearm. Most of the wrist flexors attach to one main tendon on the medial epicondyle. This tendon is called the common flexor tendon.

Tendons connect muscle to bone. Tendons are made up of strands of a material called collagen. The collagen strands are lined up in bundles next to each other.

Because the collagen strands in tendons are lined up, tendons have high tensile strength. This means they can withstand high forces that pull against both ends of the tendon. When muscles work, they pull on one end of the tendon. The other end of the tendon pulls on the bone, causing the bone to move.

The wrist flexor muscles contract when you flex your wrist, twist your forearm down, or grip with your hand. The contracting muscles pull on the flexor tendon. The forces that pull on the tendon can build when

you grip a golf club during a golf swing or do other similar actions.

Related Document: A Patient's Guide to Elbow Anatomy

Causes

Why did I develop golfer's elbow?

Overuse of the muscles and tendons of the forearm and elbow are the most common reason people develop golfer's elbow. Repeating some types of activities over and over again can put too much strain on the elbow tendons. These activities are not necessarily high-level sports competition. Shoveling, gardening, and hammering nails can all cause the pain of golfer's elbow. Swimmers who try to pick up speed by powering their arm through the water can also strain the flexor tendon at the elbow.

In some cases, the symptoms of golfer's elbow are due to inflammation. In an acute injury, the body undergoes an inflammatory response. Special inflammatory cells make their way to the injured tissues to help them heal. Conditions that involve inflammation are indicated by -itis on the end of the word. For example, inflammation in a tendon is called tendonitis. Inflammation around the medial epicondyle is called medial epicondylitis.

However, golfer's elbow often is not caused by inflammation. Rather, it is a problem within the cells of the tendon. Doctors call this condition tendonosis. In tendonosis, wear and tear is thought to lead to tissue degeneration. A degenerated tendon usually has an abnormal arrangement of collagen fibers.

Instead of inflammatory cells, the body produces a type of cells called fibroblasts. When this happens, the collagen loses its strength. It becomes fragile and can break or be easily injured. Each time the collagen breaks down, the body responds by forming scar tissue in the tendon. Eventually, the tendon becomes thickened from extra scar tissue.

No one really knows exactly what causes tendonosis. Some doctors think that the forearm tendon develops small tears with too much activity. The tears try to heal, but constant strain and overuse keep re-injuring the tendon. After a while, the tendons stop trying to heal. The scar tissue never has a chance to fully heal, leaving the injured areas weakened and painful.

Symptoms

What does golfer's elbow feel like?

The main symptom of golfer's elbow is tenderness and pain at the medial epicondyle of the elbow. Pain usually starts at the medial epicondyle and may spread down the forearm. Bending your wrist, twisting your forearm down, or grasping objects can make the pain worse. You may feel less strength when grasping items or squeezing your hand into a fist.

Diagnosis

How can my doctor be sure I have golfer's elbow?

Your doctor will first take a detailed medical history. You will need to answer questions about your pain, how your pain affects you, your regular activities, and past injuries to your elbow.

The physical exam is often most helpful in diagnosing golfer's elbow. Your doctor may position your wrist and arm so you feel a stretch on the forearm muscles and tendons. This is usually painful with golfer's elbow. Other tests for wrist and forearm strength are used to help your doctor diagnose golfer's elbow.

You may need to get X-rays of your elbow. The X-rays mostly help your doctor rule out other problems with the elbow joint. The X-ray may show if there are calcium deposits on the medial epicondyle at the connection to the flexor tendon.

Golfer's elbow symptoms are very similar to a condition called cubital tunnel syndrome. This condition is caused by a pinched ulnar nerve as it crosses the elbow on its way to the hand. If your pain does not respond to treatments for golfer's elbow, your doctor may suggest tests to rule out problems with the ulnar nerve.

Related Document: [A Patient's Guide to Cubital Tunnel Syndrome](#)

When the diagnosis is not clear, the doctor may order other special tests, such as a magnetic resonance imaging (MRI) scan or ultrasound. An MRI scan uses magnetic waves to create pictures of the elbow in slices. The MRI scan shows tendons as well as bones.

Ultrasound tests use high-frequency sound waves to generate an image of the tissues below the skin. As the small ultrasound device is rubbed over the sore area, an image appears on a screen. This type of test can sometimes show collagen degeneration.

Treatment

How can I make my pain go away?

Nonsurgical Treatment

The key to nonsurgical treatment is to keep the collagen from breaking down further. The goal is to help the tendon heal.

If the problem is caused by inflammation, anti-inflammatory medications such as ibuprofen may give you some relief. If inflammation doesn't go away, your doctor may inject the elbow with cortisone. Cortisone is a powerful anti-inflammatory medication. Its benefits are temporary, but they can last for a period of weeks to several months.

Shock wave therapy is a newer form of nonsurgical treatment. It uses a machine to generate shock wave pulses to the sore area. Patients generally receive the treatment once each week for up to three weeks. It is not known exactly why it works for golfer's elbow, but recent studies indicate that this form of treatment can help ease pain, while improving range of motion and function.

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