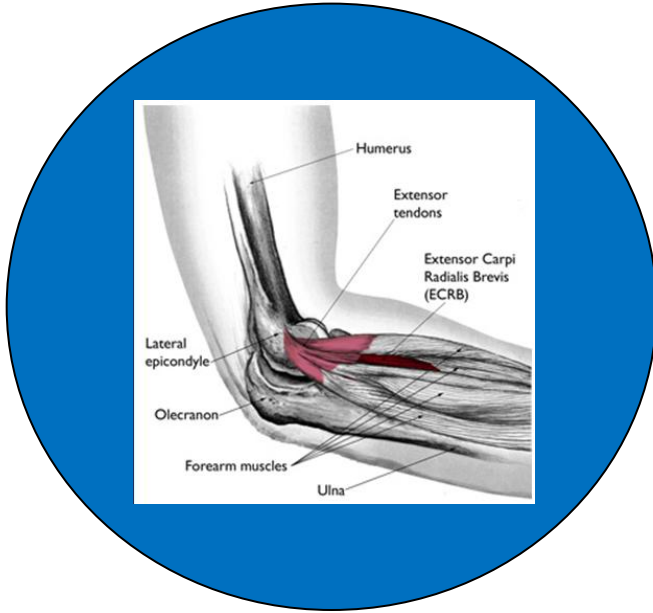


# Treating and Preventing Common Elbow Problems

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## Learn About:

- ✓ Elbow Anatomy
- ✓ Elbow In Motion
- ✓ Common Elbow Problems and Causes
- ✓ Diagnosing and Treating Elbow Problems
- ✓ Treating Epicondylitis

## Elbow Anatomy

The elbow is a hinge joint made up of the humerus, ulna and radius. The humerus is the bone in the upper arm. The radius is the forearm bone closest to your thumb and the ulna is the forearm bone closest to your little finger. Muscles, ligaments, and tendons hold the elbow joint together.

The unique positioning and interaction of the bones in the joint allows for a small amount of rotation as well as hinge action. This rotation is easily noticed during activities such as hand-to-mouth eating motions.

The primary stability of the elbow is provided by the ulnar collateral ligament, on the medial (inner) side of the elbow.

## The Elbow in Motion

The elbow joint is involved as your arm turns, bends, and straightens. Below are some of the ways the elbow moves to allow your hand and arm to work.

### **Straightening**

Straightening the elbow to move the hand away from the body is called **extension**



### **Bending**

Bending the elbow to move the hand toward the body is called **flexion**



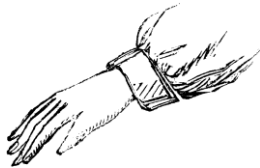
### **Palm Up**

Rotating the forearm to turn the palm up is called **supination**



### **Palm Down**

Rotating the forearm to turn the palm down is called **pronation**



### **Neutral**

Holding the palm sideways, as if to shake hands, is called the **neutral** position. This position puts the least stress on the elbow.

## Common Elbow Problems And Causes

### **Epicondylitis**

*Epicondylitis* is the most common type of elbow problem. It is named for the epicondyles, the bony knobs on the inside and the outside of the elbow. Epicondylitis is caused by using the hand and elbow the same way over and over.

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Tennis elbow, or *lateral epicondylitis*, is a painful condition of the elbow caused by overuse. Not surprisingly, playing tennis or other racquet sports can cause this condition. But several other sports and activities can also put you at risk.

Tennis elbow is an inflammation of the tendons that join the forearm muscles on the outside of the elbow. The forearm muscles and tendons become damaged from overuse — repeating the same motions again and again. This leads to pain and tenderness on the outside of the elbow.

There are many treatment options for tennis elbow. In most cases, treatment involves a team approach. Primary doctors, physical therapists, and, in some cases, surgeons work together to provide the most effective care.

**Golfer's elbow**, or *medial epicondylitis*, is an inflammatory condition of the medial epicondyle of the elbow. It is in some ways similar to tennis elbow. Medial epicondylitis occurs on the medial side of the elbow, the side closest to your ribs. It can be caused by movement like a golf swing; therefore, is often called golfer's elbow even though most people who have it do not play golf.

Keep the tips below in mind as you work and as you play to help prevent epicondylitis:

<ul style="list-style-type: none"><li>• Vary activities to reduce repeated motion</li><li>• Switch hands as much as possible</li><li>• Take frequent breaks</li><li>• Avoid strong gripping, especially with the elbow straight. (for example, move the heavy manuals and binders down off the high shelves of the computer desk)</li><li>• Keep your elbows close to your body when moving your arms.</li><li>• Place frequently used objects within easy reach (between eye and hip level and within an easy arm's reach to prevent excessive stretch)</li><li>• Stand on a raised surface so your shoulder is above any objects you reach of grasp for</li></ul>	<p><b><i>If you play sports:</i></b></p> <ul style="list-style-type: none"><li>• Warm up before you start</li><li>• Avoid bending your elbow or wrist repeatedly</li><li>• Use the proper equipment for your size and skill level. You may want to consult a professional to be sure you are using proper equipment and technique.</li><li>• Reduce vibration on a tennis racquet by trying nylon strings.</li><li>• Use whole arm (not just wrist) for tennis backstroke. Try a two-handed backstroke.</li></ul>
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## Dislocation

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When the joint surfaces of an elbow are separated, the elbow is dislocated. Elbow dislocations can be complete or partial. In a complete dislocation, the joint surfaces are completely separated. In a partial dislocation, the joint surfaces are only partly separated. A partial dislocation is also called a subluxation.

Elbow dislocations are not common. Elbow dislocations typically occur when a person falls onto an outstretched hand. When the hand hits the ground, the force is sent to the elbow. Usually, there is a turning motion in this force. This can drive and rotate the elbow out of its socket. Elbow dislocations can also happen in car accidents when the passengers reach forward to cushion the impact. The force that is sent through the arm can dislocate the elbow, just as in a fall.

## Fractures

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Falling or hitting your elbow on something hard may crack or break a bone. Your elbows can then swell and hurt, making it hard to move your arm.

## Bursitis

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A fluid-filled sac called the bursa cushions the tip of your elbow. Normally, the olecranon bursa is flat. If it becomes irritated or inflamed, more fluid will accumulate in the bursa and bursitis will develop. Bandaging the tip hard or using the elbow too much can make the bursa swell and hurt. This is called bursitis, which means inflammation of the bursa.

To keep **bursitis** from coming back, wear an elbow pad during activities in which you might bump the tip of your elbow. Try to vary your activities.

## Cubital Tunnel Syndrome

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Cubital tunnel syndrome is a condition brought on by increased pressure on the ulnar nerve at the elbow. There is a bump of bone on the inner portion of the elbow (medial epicondyle) under which the ulnar nerve passes. This site is commonly called the “funny bone.” If this nerve gets irritated, your elbow may ache or your little finger and ring finger may feel tingly or numb. Irritation can be caused by overuse of the elbow, leaning too hard on it, or banging it on something. Swelling caused by other problems can also irritate the nerve.

It may be enough just to avoid leaning on or bending your elbow for long periods to prevent cubital tunnel syndrome. If you must lean on the elbow, wear a pad to reduce pressure on the nerve. Try a telephone headset instead of bending your elbow to hold the phone to your ear. Vary your activities so you don't overdo any one thing with your arm.

## Diagnosing and Treating Elbow Problems

Some elbow problems go away on their own, but many get worse if you put off taking care of them. Your doctor will consider many factors in making a diagnosis. These include how your symptoms developed, any occupational risk factors, and recreational sports participation.

Your doctor will talk to you about what activities cause symptoms and where on your arm the symptoms occur. Be sure to tell your doctor if you have ever injured your elbow. If you have a history of rheumatoid arthritis or nerve disease, tell your doctor.

## Pinpointing the Problem

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During the examination, your doctor will use a variety of tests to pinpoint the diagnosis. For example, your doctor may ask you to try to straighten your wrist and fingers against resistance with your arm fully straight to see if this causes pain. If the tests are positive, it tells your doctor that those muscles may not

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be healthy. Your doctor may recommend additional tests, such as X-rays, CT scan, MRI, nerve conduction studies or electromyography to rule out other causes of your problem.

Once the problem is diagnosed, your healthcare provider may recommend rest, ice, compression, elevation and medication to help reduce pain and inflammation. A splint, brace or other aid may help support the elbow as it heals. Your doctor may also assign you exercises.

Some elbow problems require surgical treatment. Arthroscopic surgery uses only a few small incisions. Open surgery involves a larger incision.

## Exercises for Epicondylitis

Your doctor may ask you to do exercises that will help you improve and then maintain muscle flexibility. If an exercise makes your elbow pain worse, stop and consult your doctor right away.

<p><b>Wrist Flexor Stretch</b></p> <ul style="list-style-type: none"> <li>• Hold your right arm out at shoulder height. Hold your palm out, fingers up. Don't raise your shoulder.</li> <li>• Put your left hand across the palm of your right hand</li> <li>• With your left hand doing the work, gently pull your right hand toward you. Don't bend your fingertips back.</li> <li>• Hold for 5 seconds</li> <li>• Now switch hands and repeat.</li> <li>• Do this with each hand 3 times a day</li> </ul>	
<p><b>Wrist Extensor Stretch</b></p> <ul style="list-style-type: none"> <li>• Hold your right arm out at shoulder height. Hold your palm in, fingers down. Don't raise your shoulder.</li> <li>• Put your left hand across the back of your right hand</li> <li>• With your left hand doing the work, gently pull your right hand toward you. Don't bend your fingertips back</li> <li>• Hold for 5 seconds</li> <li>• Now switch hands and repeat.</li> <li>• Do this with each hand 3 times a day</li> </ul>	
<p><b>Wrist Curls</b></p> <ul style="list-style-type: none"> <li>• Hold a – pound weight or – ounce soup can in your hand</li> <li>• Sit with your wrist, palm down, supported over the end of your knee or edge of a table</li> <li>• Keeping your forearm on its support, curl your wrist up to lift the weight as high as you can</li> <li>• Lower your wrist back to the starting position</li> <li>• Repeat this --- times (one set). Now do the same thing palm up. Do --- sets a day palm up and the same number palm down.</li> </ul>	