

# ULNAR COLLATERAL LIGAMENT INJURY OF THE ELBOW

## What is an ulnar collateral ligament injury of the elbow?

The elbow joint is made up of the bone in the upper arm (humerus) and bones of the forearm (ulna and radius). The ulna is on the inner or pinky side of the elbow. The ulnar collateral ligament attaches the humerus to the ulna. Ligaments are strong bands of connective tissue that connect one bone to another. An injury to your ulnar collateral ligament causes pain on the inner side of your elbow.

## How does it occur?

The ulnar collateral ligament can be injured from overuse or from an acute injury. The most common way this ligament is injured is from repeated throwing. This is a common injury in baseball, especially for pitchers. Quarterbacks in football can also get this injury. The act of throwing puts stresses on your inner elbow and over time the ulnar collateral ligament can develop micro-tears which eventually can worsen.

Sometimes this ligament can be acutely injured from a fall onto the elbow or on the outstretched hand. It can also be injured if another person lands on your elbow. These types of injuries are acute sprains. Sprains may be graded 1, 2, or 3 depending on their severity:

- grade 1 sprain: pain with minimal damage to the ligaments
- grade 2 sprain: more ligament damage and mild looseness of the joint
- grade 3 sprain: complete tearing of the ligament and the joint is very loose or unstable

Sometimes sprains are just classified as mild or severe, depending on the amount of ligament damage.

## What are the symptoms?

Symptoms can include:

- pain on the inner side of the elbow, both with activity or with rest
- swelling
- weakness
- loss of power with throwing

## How is it diagnosed?

Your healthcare provider will take your history and examine you. Your provider will test for looseness or laxity in the elbow. You may have an x-ray to see if

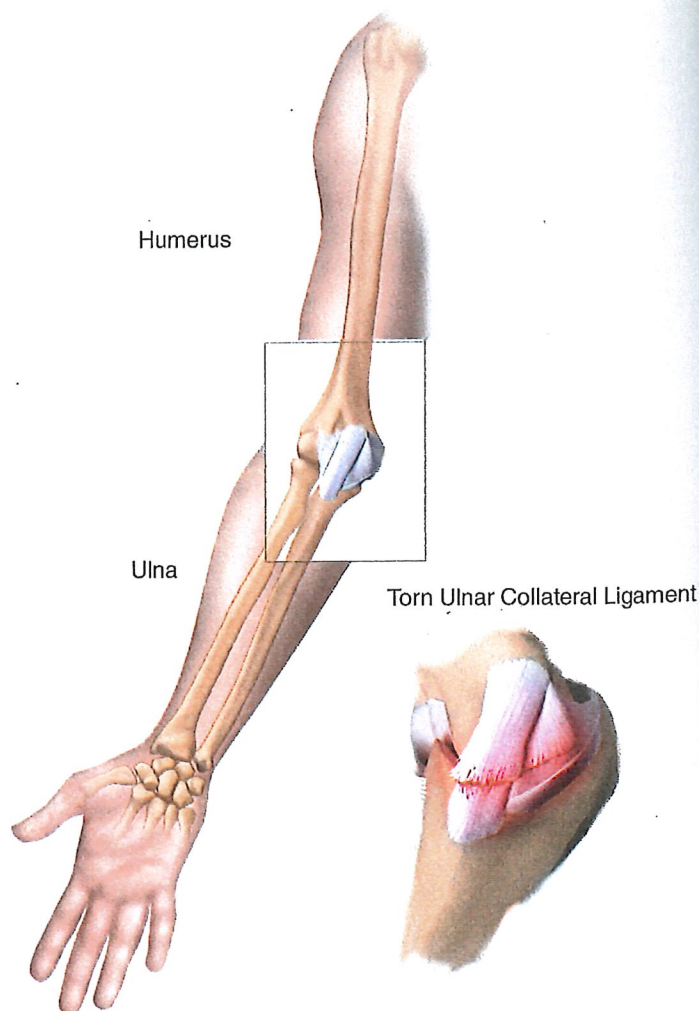
there are any bony injuries to the elbow. An MRI, MRI arthrogram (dye is injected into the elbow joint before the MRI), or ultrasound may be done to see if the ligament is torn. The ligament may be partially or completely torn.

## What is the treatment?

The initial treatment for this injury is ice and rest. You should ice your elbow for 20 to 30 minutes 3 to 4 times a day for the first 2 to 3 days or until the pain goes away. After that, ice your elbow at least once a day until all your symptoms are gone. Your provider will recommend or prescribe medicine to reduce pain and inflammation.

If you have an overuse injury, rest from throwing is extremely important. If the problem is diagnosed

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early and you have a partial tear, rest for 3 to 6 weeks may be effective. Sometimes the rest period needs to be longer. Your provider will give you rehabilitation exercises. You may be referred to physical therapy. After that rest period a gradual return to throwing may need to be supervised by your healthcare provider, physical therapist or athletic trainer. If the ligament is completely torn, you may need surgery to repair it. You may also need surgery if you have a partial tear that does not improve after rest and rehabilitation.

If your injury is from a fall and not from repeated overuse your recovery time will be faster.

### How long will the effects of an ulnar collateral ligament injury of the elbow last?

An acute sprain may recover within a few weeks if the injury was not severe.

The recovery time for an overuse injury can take weeks to months.

### When can I return to my sport or activity?

The goal of rehabilitation is to return to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your elbow recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may return to throwing when you have no pain at rest or with your rehabilitation exercises. You must start throwing softly, for short distances, and for only a few minutes at a time. You will slowly and gradually increase the amount of throwing that you do. Always stop if you develop pain.

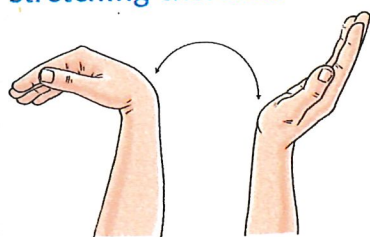
### What can I do to prevent an ulnar collateral ligament injury of the elbow?

Proper throwing mechanics can help prevent ulnar collateral injuries. Not throwing too much and stopping if your elbow hurts are most important.

## ULNAR COLLATERAL LIGAMENT INJURY OF THE ELBOW REHABILITATION EXERCISES

You may do the stretching exercises right away. You may do the strengthening exercises when stretching is nearly painless.

### Stretching exercises



WRIST ACTIVE RANGE OF MOTION

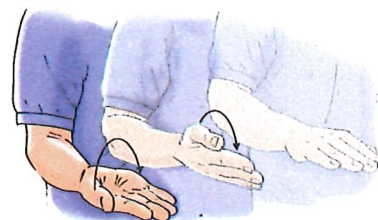
**1. WRIST ACTIVE RANGE OF MOTION:** Flexion and extension: Bend your wrist forward and backward as far as you can. Do 3 sets of 10.

**2. WRIST STRETCH:** With one hand, press the back of your other hand to help bend your wrist. Hold for 15 to 30 seconds. Next, stretch the hand back by pressing the fingers in a backward direction. Hold for 15 to 30 seconds. Keep your arm straight during this exercise. Do 3 sets on each hand.



WRIST STRETCH

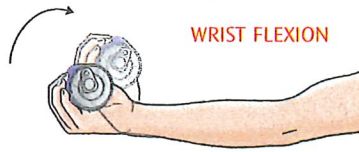
**3. FOREARM PRONATION AND SUPINATION:** With your elbow bent 90°, turn your palm upward and hold for 5 seconds. Slowly turn your palm downward and hold for 5 seconds. Make sure you keep your elbow at your side and bent 90° throughout this exercise. Do 3 sets of 10.



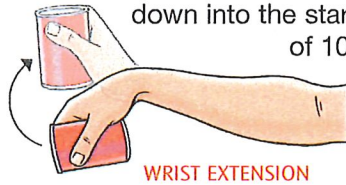
FOREARM PRONATION AND SUPINATION

### Strengthening exercises

**4. WRIST FLEXION:** Hold a can or hammer handle in your hand with your palm facing up. Bend your wrist upward. Slowly lower the weight and return to the starting position. Do 3 sets of 10. Gradually increase the weight of the can or weight you are holding.



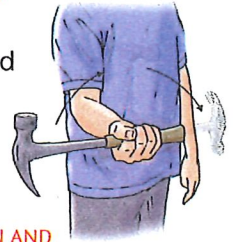
**5. WRIST EXTENSION:** Hold a soup can or hammer handle in your hand with your palm facing down. Slowly bend your wrist upward. Slowly lower the weight down into the starting position. Do 3 sets of 10. Gradually increase the weight of the object you are holding.



**6. GRIP STRENGTHENING:** Squeeze a rubber ball and hold for 5 seconds. Do 3 sets of 10.



**7. FOREARM PRONATION AND SUPINATION STRENGTHENING:** Hold a soup can or hammer handle in your hand and bend your elbow 90°. Slowly rotate your hand with your palm upward and then palm down. Do 3 sets of 10.



FOREARM PRONATION AND SUPINATION STRENGTHENING



**8. RESISTED ELBOW FLEXION:** Hold a can of soup with your palm face up. Slowly bend your elbow so that your hand is approaching your shoulder. Then lower it slowly so your elbow is completely straight. Do 3 sets of 10. Slowly increase the weight you are using.

RESISTED ELBOW FLEXION