

EPICONDYLITIS

(Tennis Elbow)



■ ■ ✪ Description

Lateral epicondylitis (tennis elbow) is the most common painful condition of the elbow. Inflammation and pain occur on the outer side of the elbow where muscles and tendons attach to the bone. The structures involved are the muscles or tendons of the forearm that bring your wrist back (extend the wrist). This occurs not only in tennis players but also in anyone who performs repeated resisted motions of the wrist. Without proper intervention, this may develop into a chronic, recurrent problem.

■ ■ ✪ Common Signs and Symptoms

- Pain and tenderness on the outer side of the elbow
- Pain or weakness with gripping activities
- Pain with twisting motions of the wrist (playing tennis, using a screwdriver, opening a door or a jar)
- Pain with lifting objects, including a coffee cup

■ ■ ✪ Causes

- Chronic repetitive stress and strain to the muscles and tendons that attach the forearm muscles to the elbow
- Sudden change in activity level or intensity
- Incorrect grip
- Incorrect grip size of racquet (often too large)
- Incorrect hitting position or technique (usually backhand; leading with the elbow)
- Using a racket that is too heavy

■ ■ ✪ Risk Increases With

- Sports or occupations that require repetitive and strenuous forearm and wrist movements (tennis, squash, racquetball, carpentry)
- Sports that require strenuous or repetitive forearm movement (tennis, racquetball, "lead arm" in golf)

- Poor physical conditioning (strength and flexibility)
- Inadequate warm-up before practice or play
- Resumption of activity before healing and rehabilitation and conditioning are complete

■ ■ ✦ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Wrist and forearm flexibility
 - Muscle strength and endurance
 - Cardiovascular fitness
- Ensure proper equipment fit.
- Maintain proper technique and have a coach correct improper technique.
- Wear a tennis elbow (counterforce) brace.

■ ■ ✦ Expected Outcome

- Acute cases, in which symptoms are present less than 4 weeks, are usually resolvable in 2 to 6 weeks.
- Chronic (repetitive) cases, in which symptoms have been present for more than 8 weeks, may require 3 to 6 months to resolve and often require referral to a physical therapist or athletic trainer.

■ ■ ✦ Possible Complications

- Frequent recurrence of symptoms, resulting in a chronic problem; appropriately addressing the problem the first time decreases frequency of recurrence
- Chronic inflammation, scarring tendon degeneration, and partial tendon tear, requiring surgery
- Delayed healing or resolution of symptoms

■ ■ ✦ General Treatment Considerations

Initial treatment consists of medications and ice to relieve pain, stretching and strengthening exercises, and modification of the activity that initially caused the problem. These can all be carried out at home for acute cases. Chronic cases often require referral to a physical therapist or athletic trainer for further evaluation and treatment. A counterforce (tennis elbow) brace may be recommended to reduce the forces to the

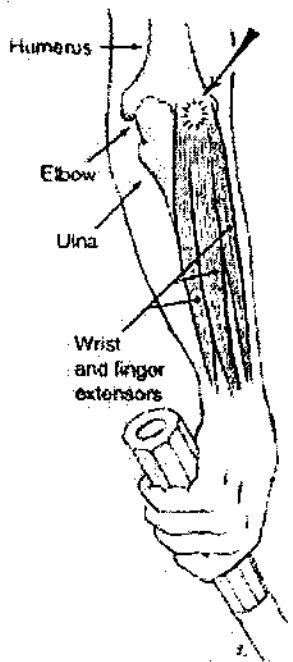


Figure 1

From Economou SG, Economou TS: Instructions for Surgery Patients. Philadelphia, WB Saunders, 1998, p. 589.

damaged tendon. A splint to immobilize the wrist may be useful early. If symptoms persist, an injection of cortisone and anesthetics or surgical intervention may be required.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetamino-phen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Cortisone injections reduce inflammation. However, this is done only in extreme cases; there is a limit to the number of times cortisone may be given due to the fact that it weakens muscle and tendon tissue. Cortisone may also cause skin and subcutaneous fat atrophy (shrinkage and thinning) and skin depigmentation (lighter skin). Anesthetics temporarily relieve pain.

■ ■ ■ Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.

- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

■ ❏ ❄️ **Notify Our Office If**

- Symptoms get worse or do not improve in 2 weeks despite treatment

**> RANGE OF MOTION AND STRETCHING
EXERCISES • Epicondylitis, Lateral (Tennis Elbow)**

These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.

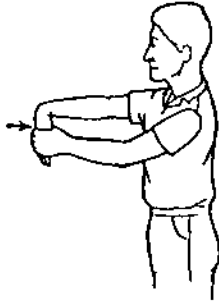


Tools RG
Know how to show how

Personal Exercise Program BRIELLE ORTHOPEDICS

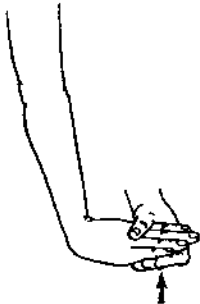
PHYSICAL THERAPY

(732) 840-1866



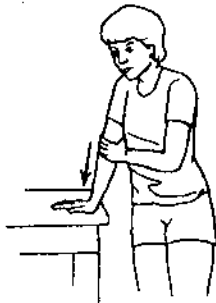
1. Hold ___affected___ wrist as shown
2. Bend the wrist until you feel a stretch
3. Hold ___20-30___ seconds
4. ___5___ repetitions, ___2-3___ times per day

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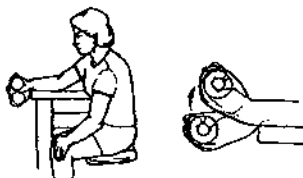
1. Hold ___affected___ wrist as shown, making sure to keep fingers straight
2. Bend the wrist and fingers upward until you feel a stretch
3. Hold ___20-30___ seconds
4. ___5___ repetitions, ___2-3___ times per day

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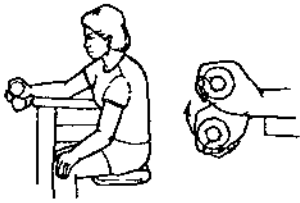
1. Place ___affected___ wrist as shown against table top
2. Press downward to bend the wrist until you feel a stretch
3. Hold ___20-30___ seconds
4. ___5___ repetitions, ___2-3___ times per day

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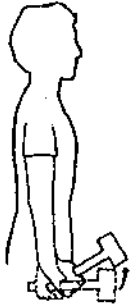
1. Sit or stand with ___affected___ arm supported as shown
2. Hold ___1-2___ lb weight in hand
3. Curl wrist slowly upward
4. Hold ___1___ seconds, slowly lower
5. ___10-20___ repetitions, ___1-2___ times per day

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1. Sit or stand with ___affected___ arm supported as shown
2. Hold ___1-2___ lb weight in hand
3. Curl wrist slowly upward
4. Hold ___1___ seconds, slowly lower
5. ___10-20___ repetitions, ___1-2___ times per day

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1. Stand holding a hammer in ___affected___ hand as shown, making sure thumb is pointing forward
2. Raise hammer upward as shown
3. Hold ___1___ seconds, slowly lower
4. ___10-20___ repetitions, ___1-2___ times per day

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1. Stand holding a hammer in ___affected___ hand as shown, making sure thumb is pointing forward
2. Raise hammer upward behind you as shown
3. Hold ___1___ seconds, slowly lower
4. ___10-20___ repetitions, ___1-2___ times per day

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1. Hold a ball as shown with your ___affected___ hand
2. Squeeze as firmly as you can
3. Hold ___1___ seconds
4. ___10-20___ repetitions, ___1-2___ times per day

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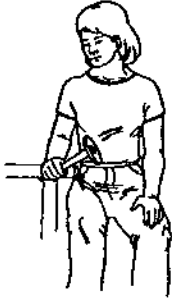
1. Assume position as shown, with ___ arm on the top
2. Try to straighten the elbow, but resist with the bottom hand
3. Hold ___3___ seconds
4. ___10-15___ repetitions, ___1-2___ times per day

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1. Support ___affected___ forearm on table
2. Hold stick with weight or hammer in hand as shown
3. Let the weight help turn your forearm and the palm of your hand upward
4. Hold ___1___ seconds
5. ___10-20___ repetitions, ___1-2___ times per day

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1. Support ___affected___ forearm on table
2. Hold stick with weight or hammer in hand as shown
3. Let the weight help turn your forearm and the palm of your hand downward
4. Hold ___1___ seconds
5. ___10-20___ repetitions, ___1-2___ times per day

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