

TRICEPS TENDON RUPTURE



■ ■ ■ Description

Triceps tendon rupture is a complete tear of the triceps tendon (the tendon behind the elbow). This structure is the tendon attachment of the triceps (back of the arm) muscle to the elbow and is important in straightening the elbow and stopping the elbow from bending too quickly. There is loss of continuity between the triceps muscle and the elbow and thus loss of function of the triceps muscles when trying to straighten the elbow or stop the elbow from bending too quickly.

■ ■ ■ Common Signs and Symptoms

- Pain, tenderness, swelling, warmth, or redness over the triceps tendon, above the back of the elbow
- Pop or rip felt at the elbow at the time of injury
- Pain and loss of strength when attempting to straighten the elbow (bench press or push-ups)
- Crepitation (a crackling sound) when the tendon is moved or touched
- Inability to straighten the elbow against gravity, such as trying to reach overhead
- Bruising at the triceps tendon and elbow after 48 hours
- Loss of firm fullness when pushing on the area where the tendon ruptured (a defect between the ends of the tendon where they separated from each other)

■ ■ ■ Causes

- Strain from sudden increase in amount or intensity of activity or overuse of the triceps muscles and tendon
- Direct blow, laceration (cut), or injury to the triceps tendon

■ ■ ■ Risk Increases With

- Sports that require sudden, explosive triceps contraction, such as off-road mountain biking or motorcycle riding and jumping
- Weightlifting, particularly bench press and push-ups
- Poor physical conditioning (strength and flexibility, weak triceps)
- Steroid use
- Previous cortisone injection
- Untreated or partially treated triceps tendinitis
- Previous triceps tendon injury

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Allow time for adequate rest and recovery between practices and competition.
- Maintain appropriate conditioning:
 - Elbow flexibility
 - Muscle strength and endurance
 - Cardiovascular fitness

- To help prevent recurrence, taping, protective strapping or bracing, or an adhesive bandage may be recommended for several weeks after healing is complete.

■ ■ ■ Expected Outcome

This condition is usually curable with appropriate treatment. Return to sports should be possible after 6 to 9 months.

■ ■ ■ Possible Complications

- Permanent weakness of the triceps muscles, especially if untreated
- Rupture of the tendon after treatment
- Prolonged disability
- Risks of surgery, including infection, bleeding, injury to nerves, elbow stiffness and loss of motion, elbow weakness, and rerupture

■ ■ ■ General Treatment Considerations

Initial treatment consists of medication and ice to relieve the pain and application of a compressive elastic bandage and elevation of the injured elbow to reduce swelling. Definitive treatment requires surgery to repair the tendon. Triceps muscle tone and contraction prevents the tendon ends from healing to each other without surgery. Thus there is no role for non-surgical treatment. Surgical treatment usually involves sewing

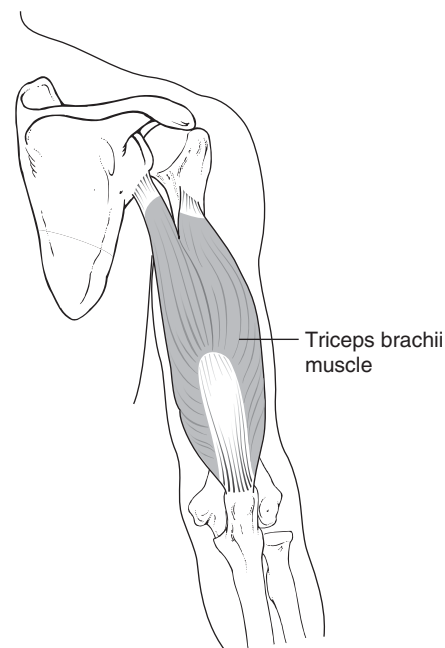


Figure 1

the ends of the tendon back together and possibly to bone, followed by immobilization in a cast or brace. After surgery, physical therapy is usually needed to regain elbow motion and strength.

■ ■ ■ 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 acetaminophen, 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.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed.

■ ■ ■ Cold Therapy

Cold is used to relieve pain and reduce inflammation. 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.

■ ■ ■ Notify Our Office If

- Symptoms get worse despite treatment
- You experience pain, numbness, or coldness in the hand
- Blue, gray, or dusky color appears in the fingernails
- Any of the following occur after surgery: fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

EXERCISES

➤ RANGE OF MOTION AND STRETCHING EXERCISES • Triceps Tendon Rupture

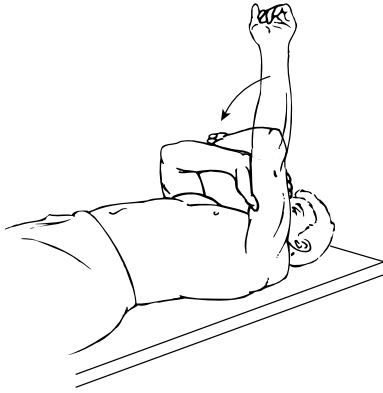
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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.



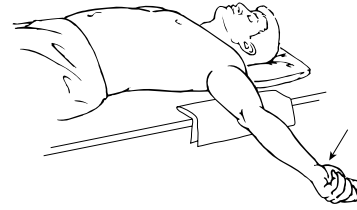
RANGE OF MOTION • Flexion

1. Bend your _____ elbow as far as you can actively.
2. Try to bend it a little farther with the other hand as shown until you feel a gentle stretch.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



RANGE OF MOTION • Flexion

1. Lie on your back with your _____ arm straight up in the air. Support your arm with the other hand as shown.
2. Let the gravity weight of your hand, wrist, and lower arm bend your elbow until you feel a slight stretch.
3. You may hold a small weight in your hand or wear a weight around your wrist (_____ lbs.) if approved by your physician, physical therapist, or athletic trainer to help stretch farther.
4. Hold this position for _____ seconds and then *slowly* return to the starting position.
5. Repeat exercise _____ times, _____ times per day.



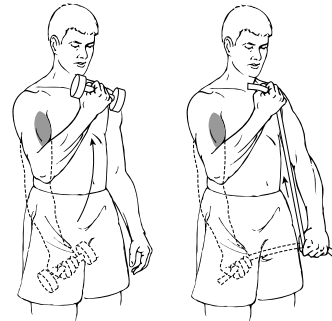
RANGE OF MOTION • Extension

1. Lie on your back and rest your elbow off the edge of the bed as shown. You may also sit at a table with the upper arm supported in a similar manner.
2. Let the gravity weight of your hand, wrist, and lower arm straighten your elbow until you feel a slight stretch.
3. You may hold a small weight in your hand or wear a weight around your wrist (_____ lbs.) if approved by your physician, physical therapist, or athletic trainer to help stretch farther.
4. Hold this position for _____ seconds and then *slowly* return to the starting position.
5. Repeat exercise _____ times, _____ times per day.

> STRENGTHENING EXERCISES • Triceps Tendon Rupture

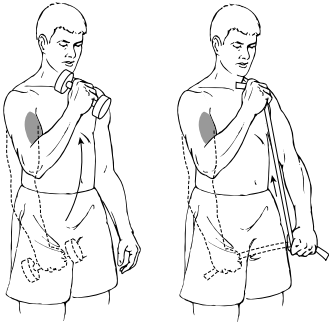
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise, gradually increasing the number of repetitions and weight used under their guidance.



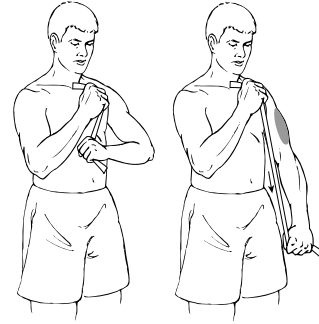
STRENGTH • Elbow Flexion

1. Stand with your arm straight and your *palm* facing forward.
2. Bend the elbow as shown using a _____ pound weight or rubber band/tubing as shown.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



STRENGTH • Elbow Flexion

1. Stand with your arm straight and your *thumb* facing forward.
2. Bend the elbow as shown using a _____ pound weight or rubber band/tubing as shown.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



STRENGTH • Elbow Extension

1. Hold the rubber band/tubing with your _____ hand on the bottom as shown.
2. Straighten out your elbow, stretching the rubber band/tubing for resistance.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



STRENGTH • Elbow Extension

1. Lie on your back with your _____ elbow bent and pointing directly at the ceiling as shown. (You may also do this exercise standing with the arm pointed overhead.)
2. Hold a _____ pound weight in your hand.
3. Straighten the elbow.
4. Hold this position for _____ seconds and then *slowly* return to the starting position.
5. Repeat exercise _____ times, _____ times per day.



STRENGTH • Elbow Extension, Isometric

1. With your involved/injured arm on top and the palm of your hand facing you, assume the position shown.
2. While resisting with the bottom hand, try to straighten the elbow of your involved/injured arm.
3. Do not allow your elbow to move.
4. Hold this position for _____ seconds, then relax.
5. Repeat exercise _____ times, _____ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions