

EXTENSOR CARPI ULNARIS INSTABILITY



■ ■ ■ Description

Extensor carpi ulnaris instability is an injury to the wrist in which one of the extensor tendons, the extensor carpi ulnaris (ECU), displaces from its normal position on the little finger side (ulnar side) of the back of the wrist. The ECU tendon is the attachment of the ECU muscle that helps straighten the wrist and bend the wrist to the little finger side. This structure is important in gripping and pulling. This tendon slides in a groove over the ulna bone and is maintained in its normal position by ligament-like tissue (retinaculum). A *subluxation* of this tendon is when the tendon slides back and forth, in and out of its normal position in the groove. A *dislocation* of the tendon is when the tendon is completely out of its groove.

■ ■ ■ Common Signs and Symptoms

- Painful snapping over the back side of the wrist, on the little finger side, usually with rotation of the forearm and wrist (turning the palm up and down)
- Uncommonly, swelling, tenderness, and bruising at the injury site (usually not associated with an acute injury)
- Often, few or no symptoms

■ ■ ■ Causes

- Usually, repetitive, excessive turning of the palm upward; also, forceful turning up of the palm, occasionally with bending the wrist toward the little finger and wrist bending, which results in tearing of the retinaculum allowing the tendon to slide out of its position within the groove
- Congenital abnormality (you are born with it), such as a shallow or malformed groove for the tendons

■ ■ ■ Risk Increases With

- Participation in sports that cause repetitive forceful turning up of the palm, such as tennis, golf, rodeo (bronco riding), weightlifting, and football
- Previous wrist injury or immobilization
- Poor physical conditioning (strength and flexibility)

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Hand, wrist, and forearm strength
 - Flexibility and endurance
 - Cardiovascular fitness
- For participation in risky sports, protect the wrist with supportive devices, such as wrapped elastic bandages, tape, or braces.
- Full rehabilitation must be completed after wrist injury before return to practice or competition.

■ ■ ■ Expected Outcome

Many people with this condition have no symptoms or limitations. Some, however, have chronic painful snapping and disability. Full recovery can be expected with appropriate treatment. Surgery may be necessary to stop subluxations. Return to sports may take up to 6 to 9 months.

■ ■ ■ Possible Complications

- Chronic pain and disability and recurrent subluxation and dislocation
- Rupture of the tendon from frictional wear of recurrent subluxation or dislocation
- Wrist weakness
- Prolonged disability

■ ■ ■ General Treatment Considerations

The initial treatment of acute injuries consists of ice and medications to relieve pain and inflammation and elevation of the injured wrist to reduce inflammation. For acute injuries and occasionally for chronic subluxation, splinting, taping, bracing, or casting may be recommended. If nonoperative treatment fails or there is a long history of significant recurrent symptomatic subluxation, surgery to repair the retinaculum and tendon sheath is recommended. Occasionally

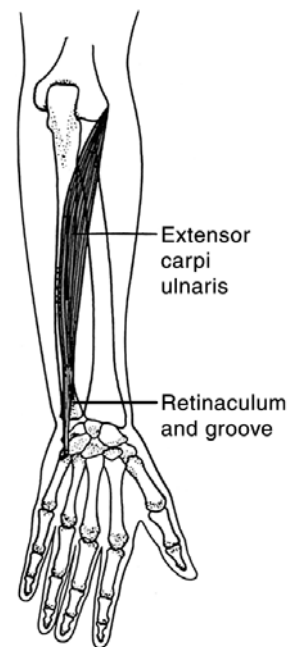


Figure 1

From Hislop HJ, Montgomery J: Daniels and Worthingham's Muscle Testing—Techniques of Manual Examination, 6th ed. Philadelphia, WB Saunders, 1995, p. 128.

the tendon needs to be cleaned and repaired due to frictional degeneration. If the tendon is torn, repair or reconstruction (replaced with other soft tissues) is necessary to restore the function of the ECU. After immobilization (with or without surgery), stretching and strengthening of the injured and weakened surrounding muscles around the wrist (due to the injury, immobilization, and surgery) are necessary. These may be done with or without the assistance of an occupational or physical therapist or athletic trainer.

■ ■ ■ 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.
- Strong pain relievers may be prescribed as necessary. Use only as directed and only as much as you need.

■ ■ ■ Cold Therapy

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.

■ ■ ■ Notify Our Office If

- Pain, tenderness, or swelling worsens despite treatment
- You experience pain, numbness, or coldness or a blue, gray, or dusky color appears in the fingernails
- Any of the following occur after surgery:
 - Signs of infection, including fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions