DISCLAIMER

This movie is an educational resource only and should not be used to make a decision on Cubital Tunnel Syndrome. All decisions about surgery must be made in conjunction with your surgeon or a licensed healthcare provider.
# MULTIMEDIA HEALTH EDUCATION MANUAL

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**INTRODUCTION**

Cubital Tunnel Syndrome is a condition characterized by compression of the ulnar nerve in an area of the elbow called the cubital tunnel. The ulnar nerve travels down the back of the elbow behind the bony bump called the medial epicondyle, and through a passageway called the cubital tunnel. The cubital tunnel is a narrow passageway on the inside of the elbow formed by bone, muscle, and ligaments with the ulnar nerve passing through its center. *(Refer fig. 1)*

The roof of the cubital tunnel is covered with a soft tissue called fascia.

When the elbow is bent, the ulnar nerve can stretch and catch on the bony bump. When the ulnar nerve is compressed or entrapped, the nerve can tear and become inflamed leading to a variety of symptoms, called cubital tunnel syndrome. *(Refer fig. 2)*

**SIGNS & SYMPTOMS**

In general, signs and symptoms of Cubital Tunnel Syndrome arise gradually, progressing to the point where the patient seeks medical attention. Left untreated, Cubital Tunnel Syndrome can lead to permanent nerve damage in the hand. Commonly reported symptoms associated with Cubital Tunnel Syndrome include: *(Refer fig. 3)*

- Intermittent numbness, tingling, and pain to the little finger, ring finger, and the inside of the hand. These symptoms occur more frequently at night, and with elbow bending or prolonged resting on the elbow.
- Aching pain to the inside of the elbow
- Weakness in hand with diminished grip strength
- Diminished sensation and fine motor control in the hand causing the person to drop objects or have difficulty in handling small objects.
- Muscle wasting in the hand and permanent nerve damage, if left untreated. *(Refer fig. 4)*
DIAGNOSIS

Your physician will perform the following:

- Medical History
- Physical Examination

Your physician may order X-ray and electrodiagnostic tests such as electromyography and nerve conduction studies. These tests can assist your doctor in determining how well the nerve is functioning and locate areas of muscle wasting and nerve compression. (Refer fig. 6)

TREATMENT

Your physician will recommend conservative treatment options initially to treat the symptoms unless muscle wasting or nerve damage is present.

Conservative treatment options may include:

- Avoid frequent bending of the elbow.
- Avoid pressure to the elbow by not leaning on it. Elbow pads may be worn to decrease pressure when working at a desk.
• Wear a brace or splint at night while sleeping to keep the elbow in a straight position. You can also wrap the arm loosely with a towel and apply tape to hold in place.

• Avoid activities that tend to bring on the symptoms.

• INSIDs (Non-Steroidal Anti-Inflammatory Drugs) such as ibuprofen or aspirin, may be ordered to reduce swelling.

• Referral to OT (Occupational Therapy) for instruction in strengthening and stretching exercises may be recommended. (Refer fig. 7)

If conservative treatment options fail to resolve the condition or if muscle wasting or severe nerve compression is present, your surgeon may recommend a surgical procedure to treat your condition.

The goal of Cubital Tunnel surgery is to reduce the pressure on the ulnar nerve by providing more space for the nerve to move freely and to increase blood flow to promote healing of the ulnar nerve. There are different surgeries that can be performed to treat your condition, such as:

(Fig. 8)

Medial Epicondylectomy: This surgery involves removing the medial epicondyle, the bony bump on the inside of the elbow, enabling the ulnar nerve to glide smoothly when the elbow is flexed and straightened.

Ulnar Nerve Transposition: This surgery involves creating a new tunnel in front of the medial epicondyle and transposing (moving) the ulnar nerve to the new tunnel.

Your surgeon will decide which options are best for you depending on your specific circumstances. (Refer fig. 9)

POST-OPERATIVE CARE

After surgery, your surgeon will give you guidelines to follow depending on the type of repair performed and the surgeon’s preference. Common post-operative guidelines include:
A bulky dressing with a plaster splint is usually applied following surgery for 10-14 days.

Elevating the arm above heart level and moving the fingers are important to prevent swelling.

The arm dressing is removed after 10-14 days for removal of the sutures.

Elbow immobilization for 3 weeks after surgery is usually indicated, longer depending on the repair performed.

Ice packs are applied to the surgical area to reduce swelling. Ice should be applied over a towel to the affected area for 20 minutes every hour. Keep the surgical incision clean and dry. Cover the area with plastic wrap when bathing or showering.

Occupational Therapy will be ordered a few weeks after surgery for strengthening and stretching exercises to maximize use of the hand and forearm.

RISKS & COMPLICATIONS

The majority of patients suffer no complications following Cubital Tunnel surgery, however, complications can occur following elbow surgery and include:

- Infection
- Nerve damage causing permanent numbness around the elbow or forearm.
- Elbow instability
- Elbow flexion contracture
- Pain at site of scar
- Symptoms unresolved even after the surgery

(Refer fig. 10)

(Fig. 10)

(Fig. 11)
SUMMARY

Cubital Tunnel Syndrome is a condition characterized by compression of the ulnar nerve in an area of the elbow called the cubital tunnel, leading to pain and weakness in the hand or elbow. Treatment involves releasing the pressure on the ulnar nerve through non-surgical methods or if required, by surgery.
YOUR SURGERY DATE

READ YOUR BOOK AND MATERIAL

VIEW YOUR VIDEO / CD / DVD / WEBSITE

PRE - HABILITATION

ARRANGE FOR BLOOD

MEDICAL CHECK UP

ADVANCE MEDICAL DIRECTIVE

PRE - ADMISSION TESTING

FAMILY SUPPORT REVIEW

Physician’s Name: ________________

Patient’s Name: ________________

Physician’s Signature: ________________

Patient’s Signature: ________________

Date: ________________

Date: ________________