



## **Duke Orthopaedics: Upper Extremity Division**

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### **Carpal Tunnel Release**

#### *What is Carpal Tunnel Syndrome?*

Carpal tunnel syndrome is a compression of a nerve in the wrist. The carpal tunnel is a space where nine tendons, an artery, and the median nerve pass from the forearm to the hand. When there is increased pressure in the carpal tunnel due to inflammation, swelling, or severe trauma, the nerve is irritated causing pain, weakness, numbness, and tingling into the thumb, index finger, middle finger, and possibly ring finger. Pain can sometimes radiate up the arm towards the shoulder.

#### *What does surgery to relieve Carpal Tunnel Syndrome involve?*

To release the pressure on the median nerve in the carpal tunnel, Dr. Klifto cuts the ligament that acts as the roof of the carpal tunnel. This released the pressure on the structures in the carpal tunnel. The ligament's only function is to cover the carpal tunnel-you will not lose any functional stability when the ligament is cut. If you need a revision surgery (a second surgery after you already had your carpal tunnel released) he may do a fat pad transfer to protect the nerve from scar tissue formation.

#### *Length of Stay*

This is same-day surgery not requiring hospital admission as long as there are no complications or other health comorbidities that require attention before discharge. You will need to have someone who can stay the entire length of the procedure and take you home.

#### *Anesthesia*

There are multiple types of anesthesia possible for surgery. The first type of anesthesia is local anesthesia of the involved hand with sedation so you will not remember the procedure. Your hand will be numb and will feel very strange. The local anesthesia will last a couple of hours. The second is general anesthesia, which means you are asleep. The anesthesiologist will speak to you on the day of surgery. The ultimate choice of anesthesia technique is up to you and your anesthesiologist.

#### *Incision*

You will have on your palm beginning at the wrist joint and extending approximately 2 inches into the hand. After the incision has healed, it is usually fairly thin and not objectionable.

### *Pain Control*

You will have pain medication prescribed for you prior to discharge. After the nerve block wears off you will have discomfort, so start your pain medicine when the block begins to wear off. Pain is usually worst for the 2 days after surgery due to inflammation from the surgical procedure. This should improve greatly in the first 24-48 hours after surgery.

### *Diet*

The combination of anesthesia and pain medications can cause nausea in some patients. If you are prone to nausea or show signs of nausea prior to discharge, a prescription for an anti-nausea medication will be provided. You may wish to advance your diet slowly the day of surgery to avoid exacerbation of nausea. Surgery and the narcotic pain medications are very constipating. Your diet should include plenty of water, fiber, fresh fruits and vegetables.

### *Dressings*

You will go home with gauze dressings on your hand. After 3 days you may remove the dressings. You will have sutures (stitches) down the length of your incision. The sutures will be removed at your first postoperative visit approximately 14 days after your surgery.

### *Physical Therapy*

Before leaving the hospital you will be given discharge instructions with exercises to move the wrist and fingers. Commonly, people are able to regain full ROM of their fingers and wrist without the need for formal physical therapy.

### *Restrictions*

Recovery from carpal tunnel release is approximately 6 weeks. During that time you will have restrictions on the use of your operative arm.

- Day of surgery-2 weeks: no lifting greater than 1-2 pounds with operative hand. No restrictions on range of motion of the fingers, wrist, elbow, or shoulder.
- Weeks 2-6: No lifting greater than 5-10 pounds
- Weeks 6+: No restrictions