#

# Carpal Tunnel Release Experience

## Ryan Karlstad, MD

How to prepare for your surgery

### What you should know about your surgery

Carpal Tunnel Release is a surgery performed to reduce compressive forces on the median nerve which passes through the wrist joint underneath the Transverse Carpal Ligament. This ligament is divided to allow more room for the median nerve thereby reducing or eliminating symptoms such as tingling, numbness, decreased grip strength and pain in the wrist and hand.

The procedure can be performed through a camera (an Endoscopic Carpal Tunnel Release or ECTR) or via an open incision (an Open Carpal Tunnel Release or simply CTR).

An open carpal tunnel release can be performed under local anesthesia with or without sedation. Endoscopic carpal tunnel releases are performed under sedation in the operating room.

### What should I do before presenting for surgery?

* You may take all your normal medications the morning of your procedure. If you were told to discontinue blood thinners, please avoid these medications as instructed.
* Wash your hands aggressively with soap and water to clean your hands as much as possible before presenting for your surgery.
* Remove any rings and leave them at home before presenting for your surgery. Artificial nails may be left in place. Nail polish may be left in place unless it is chipped or cracked or susceptible to coming off during surgery.
* If your procedure is going to be done in clinic, you may continue to eat or drink the day of surgery. If your procedure is going to be done in an operating room (i.e. at a hospital, or High Pointe Surgery Center), then discontinue eating or drinking as instructed.
* If your surgery will be done in clinic, you may drive yourself home. If your surgery will be done in an operating room (i.e. hospital or surgery center) you will be required to make arrangements to have someone drive you home.
* Call Dr. Karlstad at (651) 351-2647 before leaving for surgery if any of the following are true:
	+ You have an active infection anywhere on your body (e.g. skin infection, strep throat, dental infection, tooth abscess, urinary tract infection). Common colds and viral respiratory infections are OK.
	+ You have considerable anxiety and feel you may benefit from the administration of an oral antianxiety medication (e.g. Valium)
	+ You have open cuts or sores on the affected hand, wrist, or forearm.

what will happen the day of my Carpal tunnel release experience?

### What happens preoperatively?

If your procedure is done in the procedure room in clinic:

* You will be escorted to a clinic room where Dr. Karlstad or one of his assistants will administer local anesthetic to the intended operative site.
* You will then be escorted to the procedure room where you will lie on your back while Dr. Karlstad or one of his assistants “preps” (i.e. sterilizes) your hand by washing it with a preoperative skin prep. A tourniquet may be applied to your arm, but this is generally not used.
* Dr. Karlstad (and generally an assistant) will put on sterile gloves/gown and will confirm the lack of sensation over the operative site.
* Dr. Karlstad will perform the surgery with an assistant and he (or an assistant) will close the incision. A dressing will be applied.
* You will be given instructions for the care of your hand.
* You will be given a prescription for pain medication.
* You will be accompanied to the front desk to arrange a follow-up appointment for suture removal. You may elect to purchase additional Coban wrap (also known as veterinary wrap. See “What Should I do After Surgery” below).

If your procedure is done in the operating room:

* You will be notified by the hospital or surgery center (generally the day before your procedure) about what time to arrive
* You will be checked in the hospital or surgery center. Please bring your insurance and contact information.
* You will be accompanied to the pre-operative room where you will change into a gown and a brief medical assessment will be done. Dr. Karlstad will speak to you in the pre-operative room and will explain the procedure and answer any questions you may have. If you desire sedation, an anesthesiologist will also talk to you about your desires.
* You will be accompanied to the operating room where you will be placed on the operating table. Sedation will be provided as desired.
* Your procedure will be performed and you will awaken from sedation and be taken to the recovery suite.
* Dr. Karlstad will talk to you or a family member about the results of your surgery.
* Once the nurses are satisfied that you meet “discharge criteria” (i.e. pain controlled, nausea controlled, etc.), you will change back into your clothes and will be allowed to leave with your pre-arranged driver. Because anesthesia can have late effects (i.e. poor balance, confusion, feeling tired, poor limb control, etc.) be prepared to have someone stay with you for 24 hours after anesthesia.
* Call Twin Cities Orthopedics at (651) 439-8807 to arrange a follow-up appointment with Dr. Karlstad or his physician assistant 10-14 days after your surgery.

What should I do after surgery

### The following is Dr. Karlstad’s postoperative protocol following a Carpal Tunnel Release:

* Leave your dressing intact for 2 days following your surgery. That is, if your surgery is on a Monday, you may begin dressing changes on Wednesday.
* You may move your fingers as shown below within the dressing and use your hand for light activities such as getting dressed, eating, typing, and grasping light objects. Avoid firm or repetitive gripping or pressure against your incision until after your follow-up appointment.

 

* If you require the pain medication provided, feel free take it as instructed on the bottle. Many patients can manage their pain with Tylenol or ibuprofen (Advil).
* Confirm that you have a follow-up appointment with Dr. Karlstad or his physician assistant 10-14 days postoperatively.
* It is okay to gently move your wrist in the dressing, but the bulkiness of the dressing will prevent full range of motion.
* **On the day after your surgery**, cover your dressing with a bag or Saran Wrap when showering to keep it dry.
* **On the second day after your surgery** before your shower, remove your dressing all the way to the stitches (they are generally black in color) or the tape on your skin. You may get your hand wet in the shower, but do not soak or submerge your incision. It is OK for shampoo or a mild soap to touch your incision.
	+ - **If you have stitches**
			* Leave these alone until your follow-up visit.
			* These stitches may get wet in the shower, but do not soak or submerge
		- **If you have tape on your skin** (for Endoscopic Carpal Tunnel Releases)
			* Do NOT remove these tape strips
			* This tape may get wet in the shower, but do not soak or submerge
			* The tape will likely start falling off prior to your return visit. This is okay. Leave any attached tape alone until your next visit since these hold the ends of a stitch. Do not pull the tape off even if loosely attached since you may inadvertently pull out your stitch.
			* You may see the end of a stitch sticking out from under the tape. It looks like a fine fishing line. This is intentional.
* While your dressing is off, you may begin gentle wrist range of motion. You may not get all your motion back the first day, but you should increase your motion daily until your return visit.
* After showering, dab your incision dry. Reapply new gauze *(available at pharmacies and drug stores)* and reapply the Ace wrap. You do not need to reapply the cotton roll.
* **Between the third day and your first follow up visit** continue daily dressing changes
* Continue dressing changes daily. After 3-7 days, you may get by with a large Bandaid over your incision instead of the Ace bandage.
* You may notice bruising in your palm or forearm. This is normal and will resolve after a few weeks.
* Do not use any ointments or lotions on your incision within the first two weeks after surgery. These cause swelling and can increase the time it takes for your incision to heal.
* Perform gentle active range of motion to the wrist *(shown below*) 4-6 times daily for 5 minutes.

 

* Change this dressing daily every time you shower or bathe until your follow-up.
* At your follow-up appointment (generally 10-14 days after surgery) your sutures will be removed.
* **After your first follow-up appointment** begin scar management and desensitization as follows:
	+ You may return to light activity as tolerated 2-3 weeks after surgery. Avoid firm or repetitive gripping for 2-3 months after surgery.
	+ SCAR MANAGEMENT - Anytime an incision is made in the skin, a scar forms as a normal part of wound healing. A scar takes approximately three months to mature. Sometimes while the scar is maturing, important structures under the skin can adhere to the scar. These adhesions can prevent tendons from gliding smoothly and result in decreased range of motion. Through proper scar management, these problems can be minimized or prevented. Once your sutures are removed and incision is completely healed, you are ready to begin scar management. This should be performed 4-6 times per day.
		- Apply Vitamin E, a lotion that contains Vitamin E, Mederma Cream, or cocoa butter over your scar. Lotion will soften your scar and also aid in removing old skin and debris.
		- Perform the following methods of scar massage:
			* Using your opposite hand, move your two fingers clockwise, then counter-clockwise along the scar.
			* Pinch the skin up on either side of your scar along its entire length.
			* Rub two fingers along your scar, pushing each finger in an opposite direction from the other.
	+ DESENSITIZATION - Increased sensitivity is not uncommon, even several weeks after surgery. Over-protecting the hypersensitive area will only make the condition worse.
		- After incision is fully healed, massage with lotion that contains Vitamin E or Mederma Cream. You may also purchase Vitamin E capsules *(available in the Vitamin section of grocery stores),* poke them with a needle to release the Vitamin E oil on your incision.
		- Rub with different textures of fabric, starting with fine/smooth textures, gradually working up to harder/coarser textures.
		- Tap around the sensitive area, gradually moving inward. Increase density of material from cotton ball to sponge, to finger or eraser end of pencil.

What problems may I experience

* If you are having problems consider the following:
	+ **Pillar Pain**
		- Some patients are troubled with an ache in the area at the base of the palm which may interfere with hand function. This may be managed with supportive splinting to minimize discomfort and allow greater confidence with use of the hand.
	+ **Contrast Baths** (to reduce swelling)
		- Use two bowls large enough for your hand and wrist. Fill one with warm water and the other with cold water. Soak in warm water for 1-2 minutes and then cold water for 1 minute. Alternate and continue for 10 minutes. End in warm water.
	+ **Massage** (to reduce swelling)
		- Enclose tip of finger with other hand and slide toward wrist. For larger areas, massage toward the body in one direction only.
* Notify Dr. Karlstad at (651) 351-2647 if you notice any of the following before your follow-up appointment:
	+ Draining pus. Some serous (clear or yellow-tinged) fluid drainage is normal for a couple days after surgery.
	+ Spreading redness around your incision.
	+ A sudden increase in pain in your hand
	+ If your incision splits open.