### NEUROSURGICAL CONSULTANTS, INC.

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# Carpal Tunnel Release & Ulnar Nerve Decompression or Transposition

The doctors of Neurosurgical Consultants want to keep you informed about your hospital stay and discharge. Please review this information and talk with your doctor(s) or the hospital staff about your progress.

What is a Carpal Tunnel Release? Carpal Tunnel Syndrome is a group of symptoms caused by compression of the Median Nerve as it traverses the wrist in the Carpal Tunnel. Carpal Tunnel Release is an operation to take pressure off the Median Nerve in the wrist.

**Description of Surgery:** Intravenous antibiotics are administered before surgery to decrease the risk of infection. You will receive regional anesthesia (a tourniquet will be applied to your upper arm and the veins of your arm will be filled with a numbing medication) and you will be given a mild sedative through a vein in the other arm). Some people receive general anesthesia (put to sleep). A small incision will be made in your palm. The ligament compressing the nerve in the carpal tunnel will be identified and incised.

After completion of the carpal tunnel release, the wound is irrigated with antibiotic solution to decrease the risk of infection. If needed, absorbable stitches are used under the skin to close the incision. The skin is closed with a stitch that will need to be removed about 10 days after surgery. A sterile dressing and a bulky padding is placed over the incision. The tourniquet is then removed and numbing medicine flows out of the extremity. The extremity is then placed in a sling. Following surgery, you will be taken to the recovery room.

What is Ulnar Nerve Decompression or Transposition? The Ulnar Nerve is a nerve in the arm. Part of its course from the neck to the hand is in a groove on the inside of the elbow. You may have heard someone say, "I hit my funny bone." In actuality, they hit their Ulnar Nerve near the elbow and caused a tingling in the hand. Sometimes, the nerve is entrapped in scar tissue at the level of the elbow. This usually happens after some type of trauma. Ulnar nerve decompression releases the nerve from the scar tissue. Sometimes, the nerve needs to be repositioned so that its course takes it in front of the elbow, ulnar transposition.

**Description of Surgery:** Before surgery, intravenous antibiotics are administered to decrease the risk of infection. You will receive general anesthesia (put to sleep). Some people receive regional anesthesia (a tourniquet applied to your upper arm and the veins of your arm will be filled with a numbing medication) and you will be given a mild sedative through a vein in the other arm). An incision will be made in the region of your elbow. The ligament compressing the nerve will be identified and incised. If a transposition is necessary, a pocket will be created in the tissues below the skin on the front side of your elbow. The nerve will be positioned in the pocket. The pocket is then closed with stitches so that it forms a tube or tunnel and maintains the nerve in this position.

After completion of the Ulnar Nerve decompression or transposition, the wound is irrigated with antibiotic solution to decrease the risk of infection. Absorbable stitches are used under the skin to close the incision. The skin is closed with a stitch (that will need to be removed about 10 days after surgery) or skin glue. A sterile dressing is placed over the incision. The extremity is then placed in a sling. The tourniquet, if used, is then removed and numbing medicine flows out of the extremity or the general anesthesia is discontinued and the breathing tube is removed (extubated). Following surgery, you will be taken to the recovery room.

How will your family know when the surgery is completed? Your neurosurgeon will speak with your family members in the family waiting area or call them at home when the surgery has been completed.

## What to Expect After Surgery

**Day of Surgery:** Following the surgery you will spend 30 minutes to two hours in the Recovery Room (PACU). From there you will be taken to the Day Surgery area, where nurses who specialize in caring for surgical patients will monitor you. The nurses will monitor your temperature, blood pressure, pulse, respirations, and neurological functions. Visitors are not allowed in the Recovery Room, but family and friends can visit when you are in the Day Surgery Area. Most patients go home on the day of surgery.

- The nurses will give pain medicine as needed, initially by vein and later by mouth.
- When you are ready, you will be allowed to eat. It is not uncommon to feel nauseous after surgery. This is due to the anesthesia. Medicine is available to help relieve the nausea and any vomiting.
- You should keep your arm elevated for the first 72 hours.
- Some people have difficulty urinating after surgery. If this occurs, a small catheter will be temporarily placed in the bladder.
- Activity: You will be encouraged to walk as soon as you are comfortable and able. Walking helps prevent blood clots from forming in the legs after surgery.
- Constipation often occurs from the use of narcotic pain medications. Stool softeners and other medications may be needed to help prevent constipation.

- After surgery, it is important to do deep breathing exercises. This prevents pneumonia from developing. If you had general anesthesia, you may be given a device called an incentive spirometer to help you deep breathe.
- Discharge: You can plan on going home on the day of surgery. Rarely, a patient needs to stay in the hospital for the first night after surgery.

#### Once You Are Home

When to call the doctor? One of the three neurosurgeons from Neurosurgical Consultants Inc. is on call each day. This means that if needed, your neurosurgeon or his covering associate can be reached 24 hours a day. Call the office at (781) 769-4640 if there is drainage from the wound, a fever greater than 101 degrees Fahrenheit, new weakness, numbness, or pain the same or worse than before surgery. If the dressing feels too tight, it can be unwrapped and reapplied.

**Pain Medication:** You should only need narcotic medication, such as Percocet or Vicodin, for incisional pain during the first few days after surgery. Extra strength Tylenol should be sufficient to control any pain after the first few days and certainly by the end of the week. You should continue using the sling for three days after surgery. It can be continued longer, if desired. During the first two days, ice packs can be applied to the incisional area for 15 minutes every few hours to help control pain and swelling. The dressing should be kept in place and care should be taken to be certain that it does not get wet.

How do I care for my surgical incision? There will be a gauze dressing, sometimes secured with silk or clear plastic tape. There may also be a thick gauze wrap. This should be changed if it becomes soiled or wet. Under this dressing will be stitches. You may shower or take a bath on the second post-operative day, but should keep the incision and dressing dry. Do not swim or submerge the incision for at least 3 weeks. In general, patients can be back to their usual activity level, other than using the upper extremity that had surgery, within one or two days after the surgery.

#### **Your Future**

It is unusual to have recurrent symptoms after Carpal Tunnel Release or Ulnar Nerve Decompression/Transposition after recovering from the surgery. However, if there has been significant loss of function (weakness or numbness) from damage to the nerves before surgery, it can be a long time before the function returns to normal. Sometimes, the function does not fully recover.

As pain subsides, you can resume using the extremity for light activities. Heavy activities and movements that strain the incision should be avoided for 6 weeks.

These instructions are meant to be a guide to recovery from Carpal Tunnel Release and Ulnar Nerve Decompression/Transposition Surgery for patients in our practice. We hope that you find them helpful. They are not a substitute for medical care by a professional. Also, other neurosurgeons may have different routines.

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