

### Preparing for and Recovering From Carpal Tunnel Release

Thank you for choosing Palm Beach Hand to Shoulder for your upper extremity care. I have put this information together with the patient scheduled for carpal tunnel release in mind. Please review carefully to ensure the best possible outcome.

#### What is Carpal Tunnel Syndrome?

Carpal tunnel syndrome (CTS) is defined as excessive pressure on the median nerve as it crosses the wrist. The median nerve supplies feeling to the tips of the thumb, index, middle, and part of the ring finger. It also supplies muscles in the hand important for strength and dexterity

#### What are the symptoms of CTS?

Symptoms of CTS include pain, numbness, and tingling of the fingertips. Often there is radiating pain into the forearm. In mild to moderate cases, the symptoms come and go, and are often more pronounced at night, or while performing sustained eye level activity such as talking on the phone, driving, or holding a book, tablet, or newspaper.

Advanced cases of CTS are characterized by *constant* numbness, as well as loss of strength and dexterity. The presence of constant numbness usually indicates that some degree of irreversible nerve damage has occurred. When this is the case, the goals of surgery shift away from complete cure of symptoms towards halting any further progression.

Other conditions can be confused for CTS. These include but are not limited to diabetes and neck arthritis (cervical disc disease with radiculopathy). It is possible to have a combination of conditions.

#### What is the difference between Endoscopic and Open surgery for CTS?

Endoscopic carpal tunnel release is a means of dividing the ligament that is placing too much pressure on the median nerve from the inside out. It involves a smaller incision and a slightly faster recovery, but usually requires general anesthesia or intravenous sedation. Open carpal tunnel surgery involves a longer incision, but can be performed under local anesthesia. This may be a better option for patients who are at higher risk for complications during general anesthesia. In the long run, both approaches yield similar results. Rarely, a patient scheduled to undergo endoscopic carpal tunnel surgery ends up being converted to an open approach. The most common reason for this is the inability to get a clear view of the ligament through the camera at the time of surgery, usually because of swollen tissue or unusual anatomy. Both are outpatient procedures.

#### What can I expect after surgery?

You will have a light bandage covering the incision that permits immediate wrist and hand motion. You will be encouraged to periodically move your fingers into a fist and straighten them out in order to prevent stiffness. It is important to ice and elevate the operated hand to limit swelling. Most patients will have the option of removing the surgical bandage 3 days after surgery and replacing it with a fabric bandaid. For the first 4 weeks after surgery, you should avoid forceful gripping, grasping, bearing weight, or lifting heavy items with your operated hand. Typing, operating a mouse or phone, and driving (if not requiring narcotics for pain) are permissible the day after surgery. The incision should be kept dry until healed, usually 1-2 weeks.

Will I need therapy?

Formal hand therapy is rarely necessary after carpal tunnel surgery.

When will my symptoms of CTS go away?

Patients with mild to moderate cases of CTS will notice relief from symptoms shortly after surgery. Patients with more advanced cases may not notice a difference in symptoms for several months. In the most severe cases, surgery may not yield an appreciable difference in symptoms, but is the best way to prevent any more damage to the nerve. If there is an underlying neurologic disorder, diabetes, or neck arthritis, residual symptoms may be related to these conditions.

When can I return to work?

Patients with sedentary jobs may return to work as early as one day after surgery. Patients whose job description entails heavy lifting or repetitive loading of the hand or wrist will require anywhere from 2-6 weeks off from work.

When can I resume athletics?

Although there is a lot of variability, most patients can comfortably resume athletics at 4-6 weeks from the time of surgery. Although the incision can get wet in the shower after the suture is removed, it is best to avoid immersing it in pool, ocean, lake, or river water for a full 3 weeks after surgery.

Scar Treatment

Incisions on the palm side of the hand tend to stay sore for longer than incisions elsewhere on the body. The incision is often a bit raised, firm, and tender in the early stages of healing. Once the suture has been removed, massaging the incision for several minutes daily with vitamin E oil or moisturizer can help smooth out the incision and render it less sensitive. Silicone adhesive scar sheets can be purchased online or at many pharmacies. When placed on the scar during sleep, silicone can help with scar healing and desensitization. This regimen can be carried out for several weeks after surgery as needed.

Pillar Pain

Regardless of an endoscopic or open approach, some patients undergoing carpal tunnel surgery experience pillar pain. Pillar pain is postsurgical pain at the base of the hand on the palm side. It is considered normal for the first 2-6 weeks after surgery. If symptoms of pillar pain are present beyond 3 months from the time of surgery, I may prescribe formal hand therapy to help reduce swelling and discomfort, and to restore grip strength. I may also recommend workup for other conditions that sometimes account for persistent pain after carpal tunnel surgery, such as wrist or thumb arthritis.

Summary

Carpal tunnel release is a time-proven and reliable procedure to address one of the most common conditions of the hand. The recovery is reasonable, and the risk of recurrence is low. Depending on your occupation and recreational interests, patients are expected to return to full activity between 2-6 weeks.