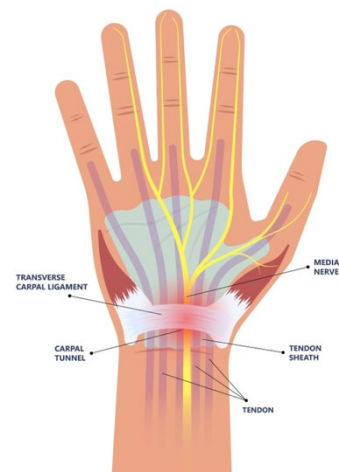


Carpal Tunnel Release

What is carpal tunnel syndrome?

Carpal tunnel syndrome (CTS) is one of the most common peripheral nerve disorders. It is caused by compression of the median nerve as it travels through the wrist to the hand. This compression results in numbness and/or aching pain in the thumb, index, and middle fingers of the affected hand. These symptoms may be worse at night or with activities such as driving. As the condition worsens, grip strength may be decreased and there may be a visible difference in the muscle at the base of the thumb on the affected hand.



CARPAL TUNNEL SYNDROME

When is surgical treatment of carpal tunnel syndrome necessary?

Surgery may become necessary when conservative treatment has failed to improve symptoms after a trial of at least 6 weeks. This conservative treatment includes such things as anti-inflammatory medication, splinting, hand therapy, and/or steroid injection(s). Surgery may also become necessary if the nerve compression has become severe and there are signs of resulting nerve damage.

What is the surgical treatment for carpal tunnel syndrome?

The surgical treatment of carpal tunnel syndrome involves releasing a structure called the transverse carpal ligament to create more space in the carpal tunnel through which the median nerve travels in the wrist. This may be done one of two ways:

- Open carpal tunnel release: this technique involves using a small incision in the heel of the palm to allow the surgeon to directly visualize the surgical site and protect the median nerve during the surgery.
- Endoscopic carpal tunnel release: this technique involves a smaller incision as an instrument called an endoscope is inserted and the visualization and release is done by looking at an image on a screen produced by the camera of the endoscope.

What is the surgical recovery?

Patients often see improvement in their nighttime symptoms of pain and numbness quickly (the night of surgery or the following night patients often report sleeping better). Daytime symptoms often take longer to improve, and the timeline of recovery is impacted by the severity of the patient's carpal tunnel syndrome before surgery. Some patients with severe carpal tunnel may not have complete

recovery of their symptoms, and this is often why surgery is recommended earlier in the disease process before permanent nerve damage occurs. Patients typically will have their sutures removed around 10-14 days after surgery and see return of grip strength around 4 weeks after surgery. Hand therapy is occasionally recommended though not always necessary.