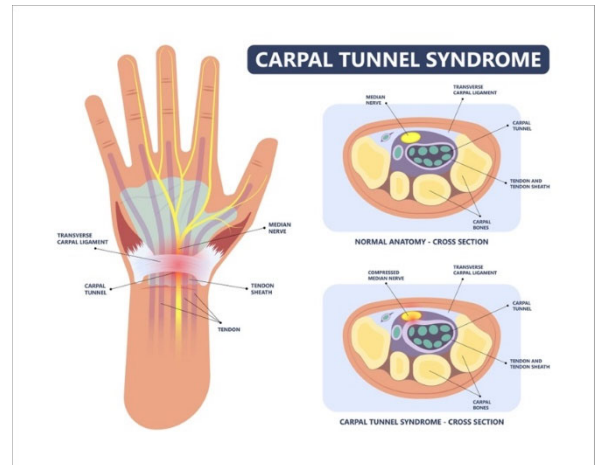


# Carpal Tunnel Syndrome

## 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 size of the muscle at the base of the thumb on the affected hand.



## What are the causes of carpal tunnel syndrome?

The exact cause of carpal tunnel syndrome is often unknown. It can be impacted by repetitive trauma or overuse. The nerve can also be compressed from thickening of the soft tissue in the wrist with chronic conditions like tendinitis or arthritis. Carpal tunnel syndrome has been associated with conditions such as pregnancy and obesity.

## How is carpal tunnel syndrome diagnosed?

- History and physical examination are the most important components in diagnosing carpal tunnel syndrome.
- Electromyography and nerve conduction studies are often recommended to aid in the diagnosis and to determine the severity of the carpal tunnel syndrome. Other imaging is typically not needed to diagnose carpal tunnel syndrome though may be recommended if there are concerns of secondary diagnoses that may be contributing to patient's symptoms.

## How is carpal tunnel syndrome treated?

- Non-operative Treatments:
  - Anti-inflammatory medications
  - Wrist braces
  - Steroid injections
  - Hand therapy
- Operative Treatments:
  - Open carpal tunnel release
  - Endoscopic carpal tunnel release