

Carpal Tunnel Syndrome

Stephen L. Olmsted, M.D.

Understanding Carpal Tunnel Syndrome

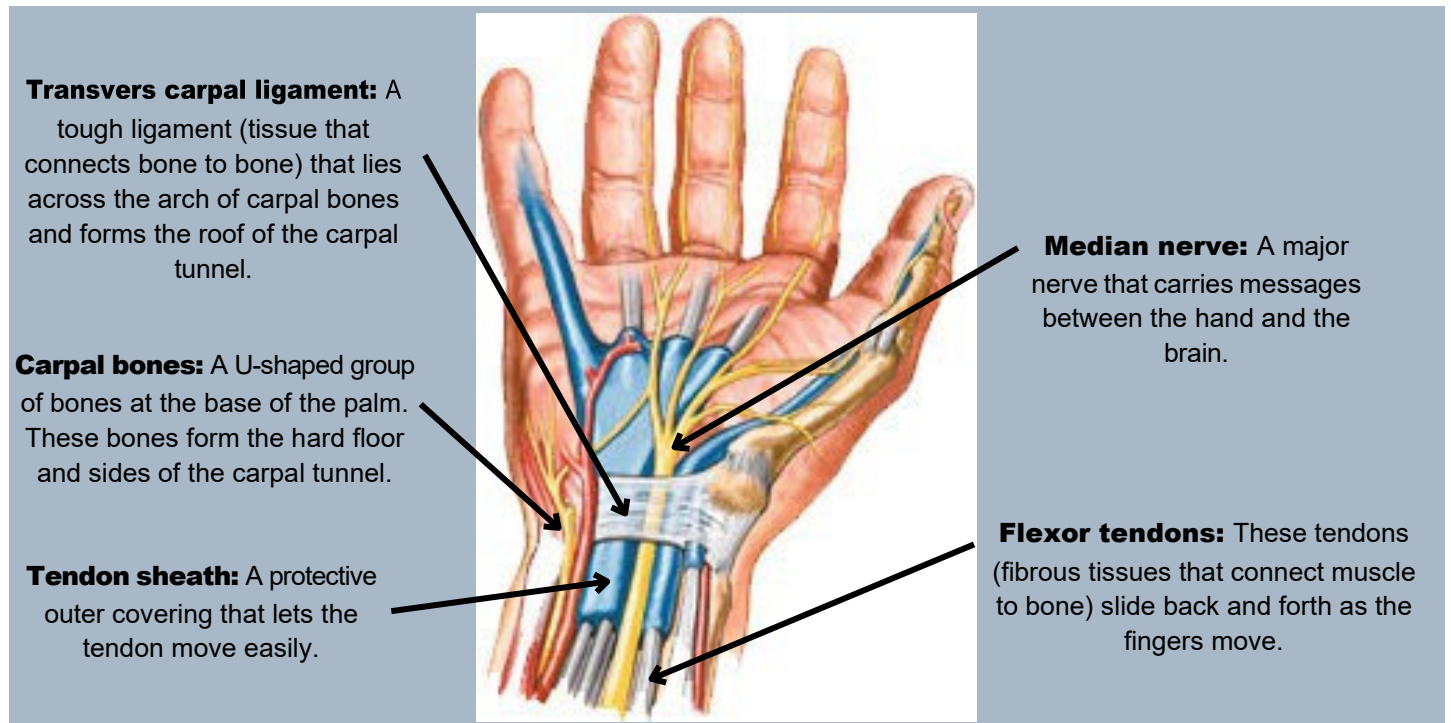
Carpal tunnel syndrome (CTS) affects a nerve (median nerve) in the wrist and hand. A ligament (transverse carpal ligament) causes pressure or flattening of the nerve in the carpal tunnel. If you have CTS, tingling and numbness can make even simple tasks hard to do. But CTS can be treated and your symptoms can be controlled.

The Symptoms of CTS

Tingling and numbness are the most common symptoms of CTS. Some people also have hand pain or even a weakened grip. At first, symptoms may wake you up at night. Later, they may also occur during your daily routines. Your symptoms may fluctuate or become more severe over time.

Learning About the Carpal Tunnel

The carpal tunnel is a narrow space inside the wrist. This space lets certain tendons that flex the fingers and thumb and the median nerve to pass from the forearm into the hand. The tunnel can narrow resulting in pressure of the median nerve that causes the numbness, tingling and pain.



Early Treatment of CTS

Wearing a splint

A splint works by keeping the wrist in a neutral (straight) position. This prevents the position and movement that may narrow the carpal tunnel and increase pressure on the nerve.

Cortisone Injection

Cortisone can reduce inflammation and decrease volume of the synovium in the tunnel. You may feel some soreness for 24-48 hours following the injection.

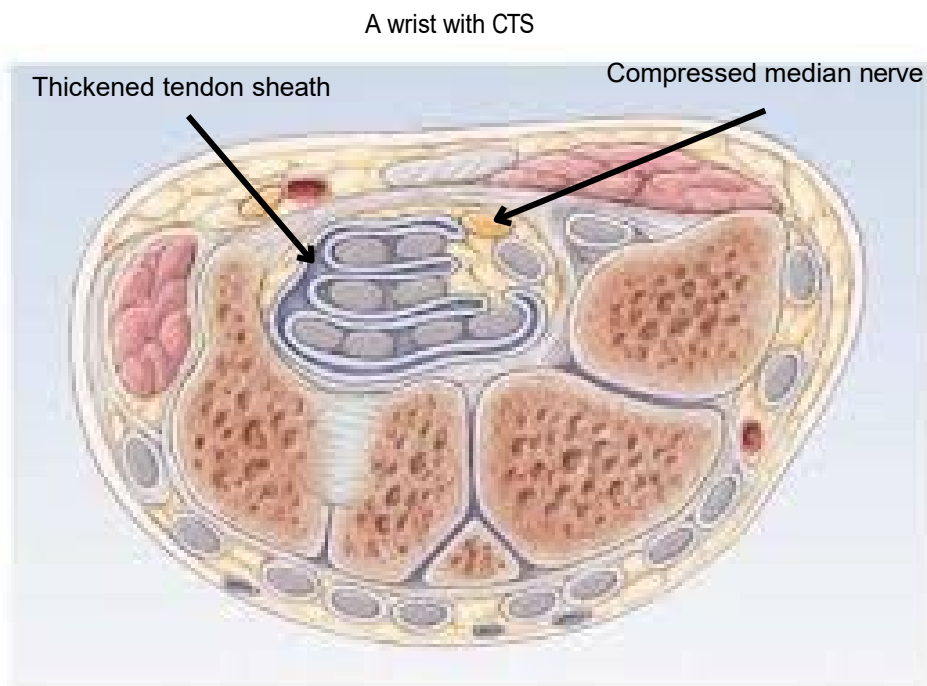
Types of Surgery

Open Surgery

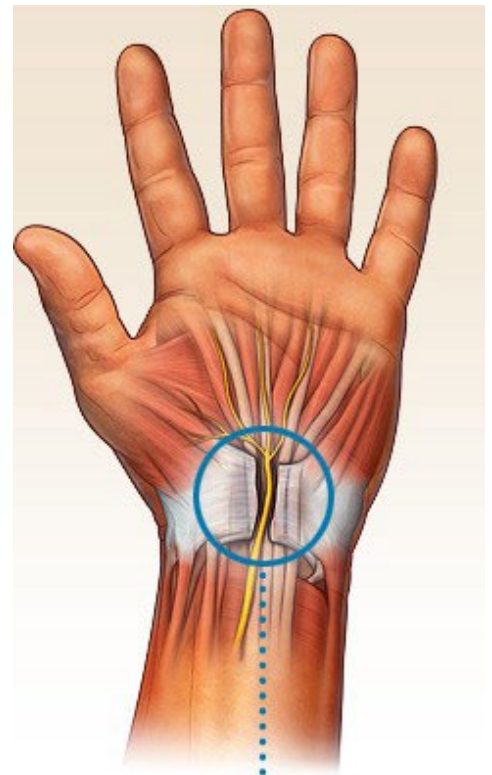
With open surgery, there is one incision in your palm. Then the transverse carpal ligament is released. This will open the tunnel making more room for the nerve. (Top picture)

Endoscopic Surgery

With endoscopic surgery, one small incision may be made in your wrist. A scope (with a small camera attached) and tools are inserted under the transverse carpal ligament. Then the ligament is released from within the tunnel, visualized by the camera. This increases the size of the tunnel taking pressure off of the nerve. (Bottom picture)



With CTS, the tendon sheath may thicken and enlarge. This reduces the amount of space inside the carpal tunnel. As a result, the median nerve may be compressed. This can lead to tingling, numbness or other symptoms.



Transverse ligament released

After Carpal Tunnel Surgery

- Keep your hand raised above heart level. This will help reduce swelling.
- Limit hand and wrist use as instructed - No heavy gripping, grasping or lifting.
- You may use your hand for light activities like eating, brushing your teeth, and getting dressed.
- Take any pain medications as directed.
- Do hand exercises as directed.