

Carpal Tunnel

Christian Apollon

April 2, 2006

What is carpal tunnel?

There are 8 bones in the wrist that are referred to as carpals. The carpals form a “tunnel” that retains many flexor tendons that help control movement in the fingers. It also helps provide an easy pathway for the median nerve to reach sensory cells in the hand. Constant movement of the wrist agitates the protective layers of the tendons which causes it to build a thicker, more callous wall. However, these swollen tendons put a lot of pressure on the median nerve that obstructs normal movement of the wrist.

What are the causes? Symptoms?

Carpal tunnel can be caused over a long period of constant, excessive movement of the hand. Jobs that require constant movement of fingers and wrists (i.e. Some factory jobs, sewing, constant computer typing) can greatly increase your likelihood of carpal tunnel. Some symptoms include, swelling of the wrists, painful tingling and decrease in strength in hands.

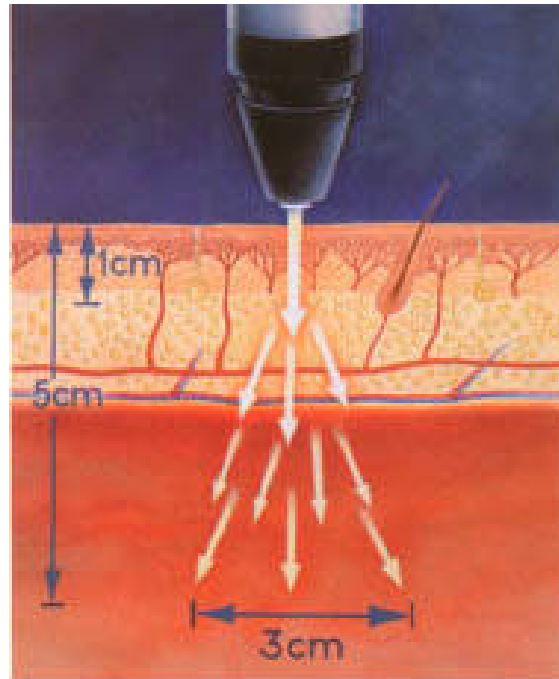
Tips:

- Anti-inflammatory drugs/cortisone
- Applying heat/cold
- Protect joints
- Relax

Treatments include:

- Surgery
 - Endoscopic surgery
- Therapy
 - Low level laser: Increase in ATP, cellular oxygen consumption and increase anti-inflammatory agents.
 - Ultrasound : 50% pain reduction in 7 of 8 cases

Kuo, E. Christina, M.D., Weiland, J.



Caution: Investigational device limited by Federal (USA) Law to investigational use

Andrew, *The Journal of Musculoskeletal Medicine*, February 2006, Cliggott Publication, pages 110-125

Maganaris, N. Constantinos, De Haan, Arnold, *Muscle and Nerve*, vol 133/ No. 1, January 2006

THE JOURNAL OF HAND SURGERY, St. Louis, Vol. 17, No. 6, PP. 1009-1011, November, 1992 (Copyright 1992 by Mosby-Year Book, Inc.)

Journal of the American Osteopathic Association Vol 105, No. 3, March 2005, 135-143

<http://www.arthritis.ca/>