

## The Light At The End Of The Tunnel

By

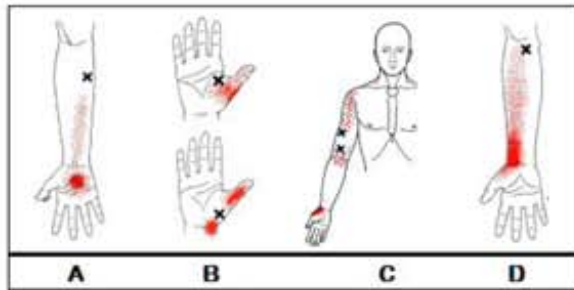
Victoria L. Magown, CMTPT, LMT and George S. Pellegrino, LMT, CMTPT

The deadline for Linda's project was rapidly approaching. Typing feverishly at her keyboard in spite of pain in her hands, wrists and arms, she knew people were counting on her to get this project done on schedule. Working at a computer day after day, made this pain a common occurrence. "Carpal Tunnel Syndrome?", she mused. For some people this story is all too familiar.

Many people know the term Carpal Tunnel Syndrome or CTS. How often have you seen people rubbing their hands to get rid of their pain? When they notice you observing them, their explanation is "Carpal Tunnel!" Have you had hand pain and wondered, "Do I have Carpal Tunnel Syndrome"?

Most people use this term to explain pain in their hands without fully understanding what the term means. The pain of CTS is caused by compression of the median nerve in the tunnel through the carpal bones. "Carpals" are the bones of the wrist and the tunnel is the space between the bones and the flat, broad ligament that crosses over the top.

In Linda's case, the initiating cause was "Repetitive Motion Injury", currently defined as "injury to tissues due to repeated trauma, usually associated with writing, painting, typing or use of vibrating tools or hand tools. More specifically, CTS may be, but is not always, caused by repetitive motion of the wrist."



Although Linda had many of the signs of CTS, there can be other causes. As early as 1951, an industrial disease called Occupational Myalgia, referred to injuries specific to muscles involved in the use of another modern miracle, the typewriter. Not much has changed.

Carpal Tunnel Syndrome is characterized by pain, numbness and/or tingling on the palm side of the hand

over the thumb, palm, index and middle fingers. Pain can extend into the forearm and upper arm.

Trigger Points (TrPs) in muscles can cause these patterns of pain. TrPs are a hypersensitive focus of pain in a muscle that restricts range of motion and refers pain in a predictable pattern usually away from the site of the Trigger Point. They can be laid down in muscles through direct trauma or repetitive motion.

Take for instance the palmaris longus (Illustration A). TrPs in this muscle can cause a painful, prickly sensation in the palm of the hand, wrist and forearm. Linda also had pain in her thumb caused by two muscles in the palm of the hand, the adductor and opponens pollicis (Illustration B). These muscles can mimic CTS and need to be considered before surgery.

Another muscle that developed TrPs as a result of her occupation was the brachialis (Illustration C). Upper arm pain from this muscle was part of Linda's symptoms, which she never connected to the pain in her thumb. It was involved as the result of keeping the forearms bent at a keyboard for hours at a time.

The pronator teres (Illustration D), a muscle that turns the palm downward as in typing, not only causes wrist and thumb pain, but compresses the very nerve responsible for CTS, the median nerve. The tunnel of the carpals is not the only location at which this nerve can be compressed.

Appropriate treatment by the Certified Myofascial Trigger Point Therapists at MyoRehab eliminated Linda's pain. A specific Home Exercise Program and modifications to her workstation prevent the return of her symptoms.

Are you looking for "The Light At The End Of The Tunnel"? Do you suspect Carpal Tunnel Syndrome? [Give us a call at MyoRehab.](#)