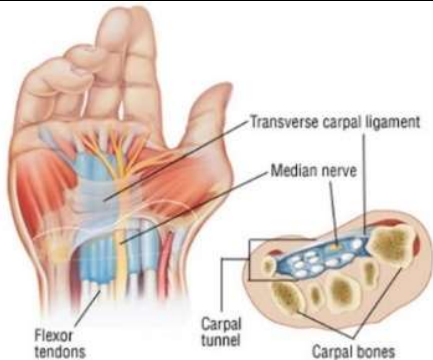


Carpal Tunnel Syndrome

Self-care Guide

Introduction

The median nerve and several tendons run from your forearm to your hand through a small space in your wrist called carpal tunnel. The median nerve controls movement and feeling in your thumb and first three fingers. Excessive pressure on the median nerve can cause carpal tunnel syndrome. This pressure can come from swelling of the tendon sheath or anything that makes the carpal tunnel smaller.



Cause

Carpal tunnel syndrome is usually caused by repeated hand and wrist movements in poor posture. They can cause the sheath membranes surrounding the flexor tendons of the wrist to swell (tenosynovitis) which will take up space in the carpal tunnel and increase the pressure on the median nerve.

Common risk factors include obesity, rheumatoid arthritis, gout, diabetes, lupus, hypothyroidism and wrist fracture or dislocation.

Symptoms



Symptoms most often occur in parts of the hand supplied by the median nerve: the thumb, the index finger, the middle finger, and half of the ring finger.

There is numbness or pain in your hand, forearm, or wrist especially at night time. The strength and grip in your fingers, thumb, or hand may also reduce.

Home care

Acute inflammatory stage:

1. *Rest and ice therapy:* when there is redness

or hotness; pain at rest or during night time, you should take rest and reduce the wrist movements. You may also apply ice on the wrist for 15 minutes, up to three times per day until symptoms improved.

2. *Uses of wrist splint:*

Wrist splint is designed to allow the wrist rest in neutral wrist extension position to relief wrist pressure. For the best result, one should wear brace at night and, if possible, during the activity primarily causing stress on the wrist.



Chronic stage:

After the acute inflammation subsided, following the home care as instructed by therapist can promote the recovery:

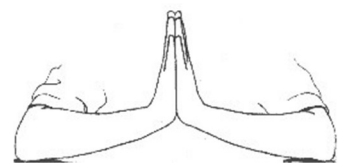
1. To reduce the pain and promote circulation through hot pad or soak your wrist in warm water bath ($<45^{\circ}\text{C}$) for 15 minutes

2. Stretching exercise

- Pull the fingers backward with the good hand until there is stretching feeling in the forearm, keep for 10 sec and repeat for 10 times



- Palm to palm, with fingers pointing up and drag the wrist down until there is stretching feeling in the forearm then keep for 10 sec and repeat 10 times



3. Muscle strengthening exercise

- Squeeze the towel roll with the hand, hold for 5 sec and do 10 times, twice per day

