



South Eastern Hand Therapy

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Carpal Tunnel Syndrome



The carpal tunnel is a compartment on the palm side of the wrist containing tendons, bones, ligaments and the median nerve. The tendons and median nerve travel from the forearm into the hand to provide sensation and movement. The median nerve provides sensory information to the thumb, index and middle fingers, and half of the ring finger.

The median nerve may become compromised if the covering around the tendons becomes inflamed, or if any extra fluid is present in the tunnel. This can reduce the space in the carpal tunnel causing compression of the nerve.

Symptoms

Carpal tunnel syndrome may produce the following symptoms in the hand or wrist:

Pain or burning sensation
Numbness
Tingling sensation or “pins & needles”
Swelling
Reduced vibratory sensation
Muscle weakness

Symptoms may be experienced more intensely during the night or in the morning. This may be due to a build up of fluid in the wrist compartment. Nerve compression may also be increased by the bent wrist position often adopted at night when sleeping.

What causes it?

The following may cause the development of carpal tunnel syndrome:

- Overuse or repetitive tasks involving the hand or wrist (e.g. Grasping, pulling, lifting)
- Arthritis and problems associated with ageing. Awkward wrist postures
- Repeated force / trauma to the wrist
- Systemic disorders (e.g. Rheumatoid arthritis, diabetes)
- Fluid retention during pregnancy Genetic link (chromosome 8)

CONSERVATIVE TREATMENT

The following treatments may be included in your rehabilitation program:

- Rest / immobilization in a wrist splint Work / activity modification
- Gentle stretching exercises and massage Corticosteroid injections (via treating doctor)
- Anti-inflammatory medications (via treating doctor)

HOME SPLINTING PROGRAM

- Wear a wrist splint every night for four weeks.
- Keep a diary—recording each day the progress with overnight symptoms of tingling, numbness or pain
- Review progress with your hand therapist

RETURN TO ACTIVITIES / WORK

When returning to activities / work **avoid**:

- Repetitive hand or wrist movements
- Forceful finger actions (e.g. Pinching movements)
- Extreme or awkward postures
- Gripping tools for extended periods
- Vibrations or where extreme force is required

When returning to activities / work **do**:

- Have rest periods in between activities or rotate between different tasks
- Stop, stand and stretch every 15 minutes if possible
- Gently stretch and exercise your wrist and hand intermittently during the day
- Use built up tools / utensils instead of forceful or fine grasp



If you have any questions or problems, please phone your therapist on 8560 0293
www.seht.com.au