

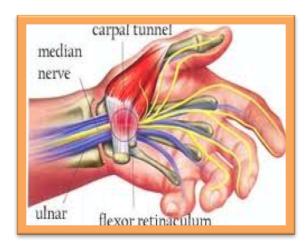
CARPAL TUNNEL SYNDROME

WHAT IS CARPAL TUNNEL SYNDROME?

The carpal tunnel is the opening passage in the wrist formed by the 8 carpal bones and the transverse carpal ligament. Going through this passageway are tendons, arteries, nerves and other structures. When there is increased pressure through this pathway, often through inflammation or thickening of the tendons with repetitive tasks the median nerve gets trapped resulting in the condition called carpal tunnel.

INJURY FACTS:

Carpal tunnel syndrome is most common in middle-aged women. There is also a high prevalence in pregnant women that is theorised to be due to hormones changes and increased fluid/swelling present in the carpal tunnel.



CAUSES OF INJURY:

The major causes of carpal tunnel syndrome are:

- Repetitive tasks often of gripping nature common with chefs, farmers, computer based workers and manual labourers
- Increased use of vibration tools
- Pregnancy
- Previous fractures or soft tissue injuries to the wrist forearm and hand

OTHER CONTRIBUTING FACTORS:

The following conditions can also increase the likelihood of carpal tunnel syndrome:

- Smokers
- Diabetes
- Osteo and rheumatoid arthritis
- Fluid retention e.g. lymphedema
- Hypothyroidism

SIGNS AND SYMPTOMS:

- Tingling and numbness into the hand
- > Muscle tightness through the forearm
- Wrist and hand pain
- Weakness with gripping tasks
- Aching, burning and electric pain during the night and early morning
- Clumsiness' and dropping of items e.g. coffee mug



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DIAGNOSIS:

The physiotherapist will complete a subjective history to better understand your reporting history and look for the signs and symptoms mentioned above. On objective examination the physiotherapist will test for nerve involvement, muscle tightness and joint stiffness.

Often a referral will be given for a nerve conduction study, which will measure the speed and strength of nerve impulses traveling along the median nerve indicating the severity of the condition.



PHYSIO TREATMENT OPTIONS:

- Splinting, often including night splinting
- Ergonomic changes including tools and workplace set up
- > Joint mobilisation techniques
- > Soft and deep tissue massage
- > Strengthening programs
- Dry needling
- Electrotherapy

OTHER TREATMENT OPTIONS:

Corticosteroid injection can often give good symptomatic relief but decreasing to amount of fluid and swelling through the carpal tunnel.

Often carpal tunnel syndrome is treated surgically if conservative management is not successful or in chronic presentations. This surgery involves the cutting of the transverse carpal ligament (making up the roof of the tunnel) to release the pressure through the carpal tunnel. This is a common surgery and With high success rates. Following surgery 2 weeks away from work is usually required with no driving in the first 10 days. Heavy manual workers usually require 3 months away from this aggravating activity, with full recovery expected between 6-12 months.

