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#### FACULTY OF NURSING



#### CARPEL TUNNEL SYNDROME

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### CARPEL TUNNEL SYNDROME

 It is a condition caused by compression of the median nerve, which enters the hand through the narrow confines of a carpel tunnel. It is formed by ligaments and bones. CTS is the most common compression neuropathy.



## Transverse carpal ligament Flexor tendons



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# Causes

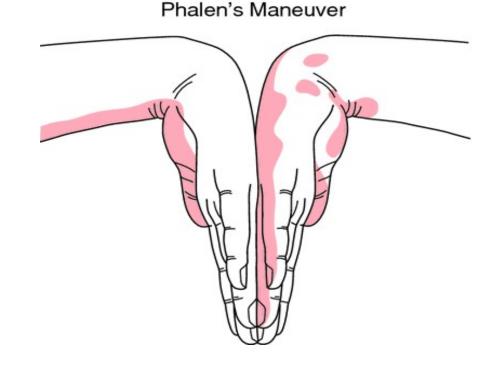
- Pressure from trauma or edema caused by inflammation of tendon
- Neoplasm
- Rheumatoid synovial disease or soft tissue masses.
- This syndrome is associated with occupations that require continues wrist movements.

#### **Clinical Manifestations**

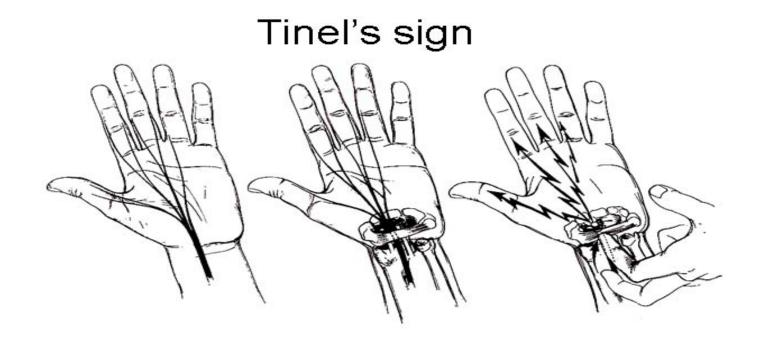
- Weakness especially of the thumb, burning pain (causalgia) and
- Numbness or Impaired Sensation in the distribution of the median nerve and clumsiness in performing fine hand movements,
- Tingling may present.

#### Cont...

 Holding tissues in acute flexion for 60 seconds will produce tingling and numbress over the distribution of the median nerve. This is known as positive PHALENS SIGN



 Tapping gently over the area of the inflamed median nerve may reproduce the parasthesia. This is known as positive TINELS SIGN



 Adaptive devices such as wrist splints may be worn to hold the wrist in slight dorsiflexion to relieve pressure on the median nerve.

#### Management

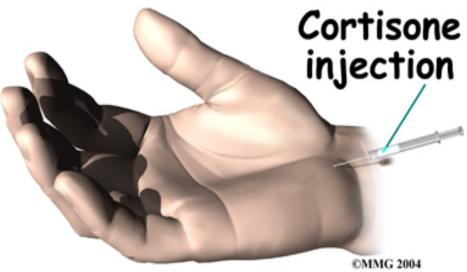
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#### Cont...

Relieve underlying cause

- Early symptoms can be relieved by stopping aggravating movements.
- If the cause is inflammation inj.
  Corticosteroid directly in carpel tunnel may provide short term relief (6 months)



#### Cont...

Surgical decompression by longitudinal division of transverse carpel tunnel ligament. Endoscopic carpel tunnel release or modified carpel tunnel release procedure may also useful.

