Carpal Tunnel Syndrome

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Mechanism of Injury/Pathophysiology

Carpal tunnel syndrome, or median nerve compression at the wrist, is an ischemic insult to the nerve caused by increased contents within the canal or external compressive factors that decrease the volume of the canal. Some of the more common etiologies include the following:

Trauma

- Acute hemorrhage from a forearm, wrist, or hand injury
- Direct compression by carpal dislocation or distal radius fracture
- High-pressure injection injury
- Compartment syndrome (increased pressure)

Medical Conditions

- Diabetes
- Hypothyroidism
- Rheumatoid arthritis
- Renal failure
- Amyloidosis
- Alcoholism