Provincial Carpal Tunnel Syndrome (CTS) Primary Care Pathway

1. History

- Numbness and tingling in hand(s) including nighttime presentation
- Pain in hand and wrist(s): Sharp, burning
- Difficulty with fine motor tasks/clumsiness
- Median nerve distribution
- Precipitating factors/repetitive action/positional worsening (especially wrist flexion)
- Flick sign
- Consider other underlying conditions
- Previous treatment

2. Physical exam

- Assess sensation
- Atrophy of thenar muscles
- Weakness of thumb opposition
- Consider provocative tests to support diagnosis: Durkan's test, Tinel's sign; Phalen's test

Consider **cervical radiculopathies** and **diabetic polyneuropathy if CTS signs unclear**
Diabetic Peripheral Neuropathy Clinical Pathway

3. Red Flags

- Signs of infection
- Post-traumatic median nerve involvement

→ RAAPID Upper limb surgeon*, or ER. See referral guideline tab for details.

- Rapidly progressive, onset within 7 days

→ Neurology urgent referral or ER, depending on local resources. See referral guideline tab for details.

Other Considerations

- Non-specific muscle atrophy and weakness (broader than thenar muscles) or numbness and tingling outside the median nerve distribution.

→ Referral to Neurology or Physiatry. See referral guideline tab for details.

No Red Flags and clear clinical picture
Clinical diagnosis of CTS is made

4. Management

Mild/ Moderate

- Intermittent symptoms
- Numbness associated with certain activities
- Overall minimal impact to daily life

Severe

- Constant symptoms
- Weakness affecting activity and grip strength
- Atrophy
- Pronounced impacts to ADLs, QoL, and/or sleep

Conservative Management Strategies (Mild/Moderate)

- Wrist splint while sleeping and during activities that exacerbate symptoms
- Activity modification
- Avoid precipitating factors
  - Reduce / eliminate repetitive motions
- Consider referral for **one** ultrasound-guided steroid injection

If there is no clinical improvement in **8-12** weeks; steroid injection is unavailable, ineffective or not tolerated, or symptoms worsen.

Management (Severe or Persistently Symptomatic Mild/Moderate)

- Initiate or continue conservative management strategies for mild/moderate
- Consider referral if **first** steroid injection is ineffective
  - Advise against repeated carpal tunnel steroid injections (limit to 3 in a lifetime)
- Complete referral to surgeon/FAST AND order Investigations during referral process (see referral guideline tab for details):
  - **Mild/moderate not responsive to conservative management/nonoperative measures**: Routine referral
  - **Severe:** Priority referral
  - Refer for **electrodiagnostic studies (EDS)** – Should be requested at time of referral but are not mandatory. Forward results to surgeon once available.
    - If EDS not available or long wait times, consider referral for **Ultrasound** of wrist (EDS is preferred).

See referral guideline tab for details on an optimal referral

***Upper limb surgeon** includes plastic and orthopedic surgeons, depending on zone.