Nerve compression syndromes often lead to troubling symptoms for patients, and, in some cases, nerve damage results if left untreated.

These syndromes are generally caused by pinching of, or pressure on, a peripheral nerve by a ligament or other structure. Surgery may be needed for definitive treatment.

Carpal Tunnel Syndrome is the most common nerve compression problem affecting the upper extremity and it is the easiest to diagnose and treat.

Other Syndromes Caused by Nerve Compression:
- Cubital Tunnel Syndrome
- Ulnar Nerve Compression at the elbow
- Ulnar Nerve Compression at Guyon’s Canal (wrist area)
- Pronator Syndrome: median nerve compression in the forearm
- Radial Tunnel Syndrome: radial nerve compression in the lateral elbow

Carpal Tunnel Syndrome (CTS):

**Symptoms**
Classic symptoms include tingling in the thumb, index, and middle fingers along with aching in the wrist, radiation of discomfort up the arm, and nocturnal numbness. Symptoms are often caused by overuse of the hand and do not always follow the classic pattern. CTS should be considered anytime a patient presents with unexplained neurologic symptoms or pain in the hand or wrist.

**Diagnosis**
Diagnosis is initially suggested through history and physical examination. Physical tests such as Phalen’s Maneuver or Tinel’s Sign are helpful if positive, however CTS can frequently be present in the face of negative physical findings. Atrophy of thenar muscles or objective loss of sensation are signs of very advanced CTS and potentially permanent median nerve injury.

Definitive diagnosis is achieved through nerve conduction testing and EMG which can confirm the diagnosis and provide information on the severity of the nerve compression.

**Treatment**
Initial treatment of mild or short-term cases consists of conservative measures such as avoidance of aggravating activities, anti-inflammatories and a supportive wrist splint. If symptoms are severe, long-standing or progressive, or if conservative measures are not effective, carpal tunnel surgery is indicated and generally cures the problem. *Early surgery that is done prior to severe injury to the median nerve is most likely to achieve a positive, long-term result.*

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**Northland Plastic Surgery**

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Sandy came to us with a three year history of numbness, weakness and aching, particularly in her right hand. She underwent Endoscopic Carpal Tunnel release and within a few weeks her strength returned and she was using her hand normally.

“I am a hairdresser and use my right hand all day. I healed faster than I expected and was able to go back to work three weeks earlier. I have recommended Northland Plastic Surgery to many clients and they have also reported back to me how happy they were.” ~ Sandy