

# Numb Hands Are Not Normal

By Katharine Leppard MD, PT

**N**umb hands can be caused by a number of different medical conditions. Often the onset of numbness is so slow and gradual that people think it is a normal condition or attribute the numbness to age, and do not seek medical care until pain or weakness occurs. Certain nerves are located in regions of the body that are especially vulnerable to compression injuries. The symptoms of these different nerves being pinched can be similar, and sometimes more than one nerve is pinched at a time, making diagnosis challenging.

The most common nerve compression is Carpal Tunnel Syndrome (CTS) or entrapment of the median nerve at the wrist. The carpal tunnel is a narrow passage formed by the carpal bones of the wrist and the transverse carpal ligament. Inside the tunnel are the tendons that flex the finger and the median nerve. People are under the impression that carpal tunnel syndrome only occurs in people that perform repetitive hand work such as typing and that it only happens in the dominant hand. Although it does occur in these situations, it also can occur in the general population as well and can be in the non-dominant hand. I have patients who rarely type, have not done repetitive work, who are retired and are right handed, and they develop carpal tunnel syndrome in their left hand. Conditions such as diabetes, age over 40, rheumatoid arthritis, hypothyroid-

ism, past injury to the wrist and pregnancy all have increased risk of developing carpal tunnel syndrome.

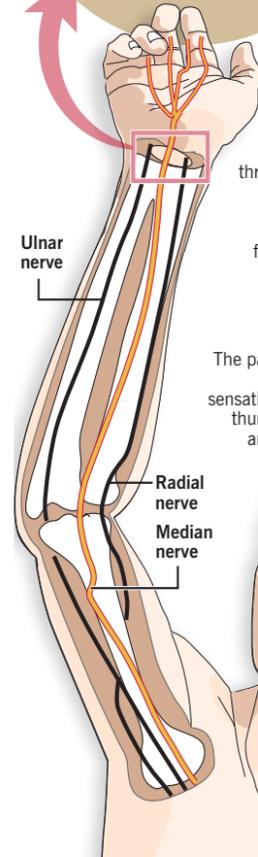
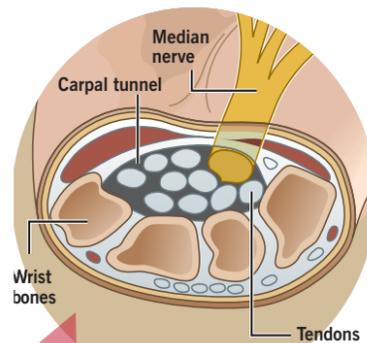
The most common first symptom of carpal tunnel syndrome is numbness. The classic distribution of numbness is in the thumb, index, middle and half of the ring finger, but it can involve the entire hand. Typically the numbness starts at night; patients will shake their hands to awaken them. As the condition worsens, the numbness begins more frequent, often awakening people at night, and also occurring during the day with activities such as gripping or driving. This can progress to severe pain and weakness if pressure on the nerve persists. I have had patients tell me they have trouble with buttons or zippers as they cannot feel the buttons or the metal tab of the zipper. I have had patients give up sewing because they cannot feel the needle. I also have had a few patients over the years, that the first symptom was severe left hand pain that awoke them at night, and they went to the emergency room thinking they were having a heart attack. Left untreated, CTS can lead to considerable discomfort, impaired function of the hand and permanent weakness. Treatment can include wrist splints, therapy, cortisone injections and surgery depending on the severity of the nerve compression.

Cubital tunnel or entrapment of the ulnar nerve at the inner elbow is the second most common pinched nerve. This nerve is in the area of the inner elbow "funny

bone." Typical symptoms include numbness in the little finger and half of the ring finger, often there is inner elbow pain radiating to the hand, and as the pressure on the ulnar nerve continues this progresses to hand weakness. Bending the elbow for long periods, such as talking on the phone or sleeping with the

## Carpal tunnel syndrome

Numbness, tingling or loss of function in the hand can result from stressful, repetitive twisting of the wrist. This condition is known as carpal tunnel syndrome.



### HOW IT'S CAUSED

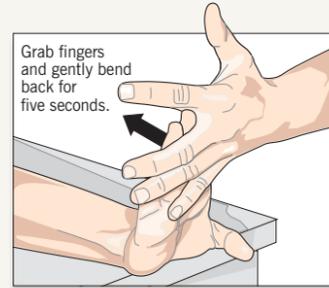
The median nerve travels through the carpal tunnel in the wrist. It carries signals to and from the fingers.

Tendons swell and pinch the median nerve.

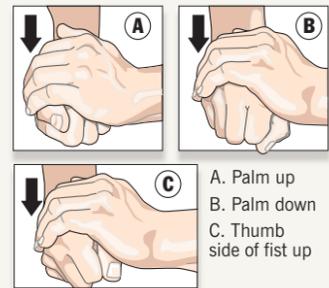
The patient feels pain and a pricking sensation in the hand, thumb, and middle and third fingers.

## Avoiding carpal tunnel

Carpal tunnel syndrome is a painful disorder caused by stressful, repetitive hand motions. These stretching exercises, done before typing jobs and during breaks, can reduce the threat:



For five seconds at a time, make a loose fist and gently press against the clenched hand, keeping the wrist straight:



Repeat these three positions with the un-clenched hand pressing the clenched hand.

Tightly clench the hand and release five times, fanning out the fingers.



Gently press the hand against a table to stretch the fingers and wrist for five seconds.



SOURCES: National Institute for Occupational Safety, American Physical Therapy Association and Lademann's Health Encyclopedia

elbow bent, pulls the ulnar nerve in the cubital tunnel taut and often triggers numbness. I have also had patients present with wasting of the hand muscles (atrophy) as the first symptom. Treatment is typically surgery to relocate or decompress the nerve.

Pinched nerves in the neck or cervical radiculopathies can occur from disc bulges or bone spurs causing pain and numbness radiating into an arm. Spinal stenosis is narrowing of the central spinal canal which can pinch the spinal cord causing numbness and weakness. Early diagnosis is important to prevent serious injury. Treatment options include physical therapy, cervical traction, epidural steroid injections or surgery depending on the specific condition identified.

I have many patients who have lived

with neck pain for years that later in life develop hand numbness. Given the history of neck pain, the first thought is that now they have a pinched nerve in the neck. However, pinched nerves in the arms are very common, and the frequency of developing those pinched nerves increases as we age. Accurate diagnosis is critical for correct treatment.



Dreamstime

Less common upper extremity nerve entrapments include radial nerve compression by the outer elbow and thoracic outlet syndrome in the armpit region. Peripheral neuropathies, a general slowing of all the nerves, can also cause hand numbness. Typically this condition starts in the feet before progressing to the hands.

Numb hands can occur from a variety of causes, some of them quite serious. It is important to seek medical evaluation from a physician who specializes in electrodiagnostic medicine for proper diagnosis and treatment recommendations. Remember, numb hands are not normal.

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