

## Carpal Tunnel Syndrome

### Brief Overview:

- It is a common condition caused by a pressure on the wrist nerve that results in hand tingling and numbness.
- Some of work habits (such as the heavy use of computer) are of the most common causes of this syndrome.
- If your symptoms begin to affect your daily activities and sleep, consult your doctor immediately.
- Decompressing the wrist is one of the most important ways to prevent the syndrome.

### Carpal Tunnel:

It is a narrow passageway within the wrist made up of bones on the bottom and the carpal ligament on the top. The median nerve passes from the forearm to the palm of the hand to control the thumb and the first three fingers.

### Carpal Tunnel Syndrome Definition:

It is a common condition that causes tingling, numbness, and sometimes pain in the hand and fingers.

### Other Names:

Median nerve entrapment.

### Causes:

Carpal tunnel syndrome is caused by pressure on the median nerve in the wrist. There are many causes of this pressure, including:

- Broken wrist.
- Inflammation and swelling caused by rheumatoid arthritis.



- In many cases there is no single cause of injury, but a combination of risk factors that contribute to the development of the condition.

#### Risk Factors:

- **Gender:** women are at higher risk than men.
- **Workplace:** such as exposure to vibration or work that requires prolonged or repeated bending of the wrist (such as: use of keyboards, mice or mobile phones...).
- **Family history** of carpal tunnel syndrome.
- **Pregnancy.**
- **Obesity.**
- **Wrist injuries.**
- **Certain health conditions**, such as diabetes and rheumatoid arthritis.

#### Symptoms:

- Pain in the fingers that may extend to the hand or arm.
- Numb hands.
- Tingling or a “pins and needles” sensation.
- Weak thumb or difficulty holding things.

**Please consult your doctor if you have any consistent signs and symptoms that affect your sleep or the performance of daily activities.**

#### Diagnosis:

- Medical history.
- Examining finger sensation and hand muscle strength.
- X-rays.
- Electromyography.
- Nerve conduction study.

### Complications:

Permanent damage to the nerves and muscles may occur if no specialist treatment is received. Treatment can reduce the risk of complications.

### Treatment:

#### 1 . Non-surgical treatments:

If the condition is diagnosed in its early stages, non-surgical methods may help improve the syndrome, including:

- Wrist splint.
- Cortisone injection.
- Anti-inflammatory drugs (NSAIDs) may help relieve pain in the short term.

#### 2 .Surgical interventions:

These interventions are designed to relieve stress by cutting the ligament that causes the pressure on the median nerve.

### Prevention:

There is no specific strategy to prevent carpal tunnel syndrome, but you can relieve pressure on your wrist by:

- Taking regular breaks to gently stretch and bend your hands and wrists.
- Relaxing and reducing the grip strength. For example, when using a mobile phone or working on the keyboard for a long time, it is recommended to click lightly. Moreover, in case of writing for a long time it is recommended to use a liquid ink wide-body pen.
- Warming your hands and avoiding cold places.

### Clinical Health Education Department

For more information, please contact us by email on:

[Hpromotion@moh.gov.sa](mailto:Hpromotion@moh.gov.sa)