

# Carpal Tunnel Syndrome

## What Is Carpal Tunnel Syndrome?

Carpal tunnel syndrome (CTS) is a common condition that occurs when the median nerve, which runs from the forearm into the hand, becomes compressed or irritated as it passes through the carpal tunnel—a narrow passageway in the wrist. This compression leads to symptoms such as pain, numbness, tingling, and weakness in the hand and fingers.

## What Are The Symptoms Of Carpal Tunnel Syndrome?

Symptoms of carpal tunnel syndrome may include:

- Numbness or tingling sensation in the thumb, index, middle, and part of the ring fingers.
- Pain or burning sensation that radiates from the wrist to the hand or forearm.
- Weakness in the hand, making it difficult to grip objects or perform fine motor tasks.
- Sensation of swelling or stiffness in the fingers, despite no visible swelling.

## What Causes Carpal Tunnel Syndrome?

Several factors can contribute to the development of carpal tunnel syndrome, including:

- Repetitive hand and wrist movements, such as typing, using vibrating tools, or assembly line work.
- Prolonged or awkward wrist positioning, leading to pressure on the median nerve.
- Trauma or injury to the wrist, causing inflammation or swelling within the carpal tunnel.
- Certain medical conditions, such as diabetes, arthritis, or thyroid disorders, which can increase the risk of nerve compression.

## How Can I Prevent Carpal Tunnel Syndrome?

To reduce the risk of developing carpal tunnel syndrome, consider the following preventive measures:

- Maintain good posture and wrist alignment during activities.
- Take frequent breaks to rest and stretch your hands and wrists.
- Use ergonomic tools and equipment that support neutral wrist positions.
- Practice proper typing techniques and wrist support while using computers or other electronic devices.
- Avoid repetitive hand and wrist movements whenever possible.

## What Are The Treatment Options?

Treatment options for carpal tunnel syndrome may include:

- Wrist splinting: Wearing a splint to keep the wrist in a neutral position and reduce pressure on the

median nerve.

- Medications: Nonsteroidal anti-inflammatory drugs (NSAIDs) or corticosteroid injections to reduce pain and inflammation.
- Physical therapy: Exercises to improve wrist strength and flexibility, as well as techniques to alleviate symptoms.
- Occupational therapy: Ergonomic assessment and modifications to workstations to minimize strain on the wrists.
- Surgery: Carpal tunnel release surgery to alleviate pressure on the median nerve by cutting the ligament that forms the roof of the carpal tunnel.

## What Does The Recovery Process Include?

Recovery from carpal tunnel release surgery varies depending on the individual and the extent of the procedure. Generally, recovery may involve:

- Pain management with medications as prescribed by your healthcare provider.
- Hand therapy or rehabilitation exercises to improve strength and flexibility.
- Gradual return to normal activities, avoiding heavy lifting or repetitive movements during the initial recovery period.
- Follow-up appointments to monitor healing and assess progress.