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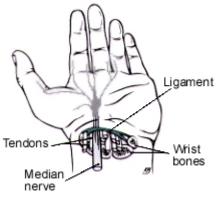
# **Carpal Tunnel Syndrome**

# What is carpal tunnel syndrome?

Carpal tunnel syndrome is a painful disorder of the wrist and hand.

The carpal tunnel is a narrow tunnel formed by the bones and other tissues of your wrist. This tunnel protects your median nerve. The median nerve helps you move your thumbs and the first 3 fingers on each hand.

Carpal tunnel syndrome occurs when other tissues in the carpal tunnel (such as ligaments and tendons) get swollen or inflamed and press against the median nerve. That pressure can make part of your hand hurt or feel numb.



# Anatomy of the hand

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# What causes carpal tunnel syndrome?

Doing the same hand movements over and over can lead to carpal tunnel syndrome. It's most common in people whose jobs require pinching or gripping with the wrist held bent. People at risk include people who use computers, carpenters, grocery checkers, assembly-line workers, meat packers, musicians and mechanics. Hobbies such as gardening, needlework, golfing and canoeing can sometimes bring on the symptoms.

Women are more likely to develop carpal tunnel syndrome than men. It also tends to be hereditary (which means it runs in families).

Carpal tunnel syndrome may also be caused by an injury to the wrist, such as a fracture. Or it may be caused by a disease such as diabetes, rheumatoid arthritis or thyroid disease. Carpal tunnel syndrome is also common during the last few months of pregnancy.

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# Symptoms of carpal tunnel syndrome

- Numbness or tingling in your hand and fingers, especially the thumb, index and middle fingers.
- Pain in your wrist, palm or forearm.
- More numbress or pain at night than during the day. The pain may be so bad it wakes you up. You may shake or rub your hand to get relief.
- Pain that increases when you use your hand or wrist more.
- Trouble gripping objects, such as a doorknob or the steering wheel of a car.
- Weakness in your thumb.

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# How is carpal tunnel syndrome diagnosed?

Your doctor will probably ask you about your symptoms. He or she may examine you and ask you how you use your hands. Your doctor may also do these tests:

- Your doctor may tap the inside of your wrist. You may feel pain or a sensation that feels like an electric shock.
- Your doctor may ask you to bend your wrist down for 1 minute to see if this causes symptoms.
- Your doctor may have you get a nerve conduction test or an electromyography (EMG) test to see whether the nerves and muscles in your arm and hand show the typical effects of carpal tunnel syndrome.

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# How serious is carpal tunnel syndrome?

Carpal tunnel syndrome usually isn't serious. With treatment, the pain will usually go away and you'll have no lasting damage to your hand or wrist.

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# How is carpal tunnel syndrome treated?

If carpal tunnel syndrome is caused by a medical problem (such as rheumatoid arthritis), your doctor will probably treat that problem first.

Your doctor may ask you to rest your wrist or change how you use your hand. He or she may also ask you to wear a splint on your wrist. The splint keeps your wrist from moving but lets your hand do most of what it normally does. A splint can help ease the pain of carpal tunnel syndrome, especially at night.

Putting ice on your wrist to reduce swelling, massaging the area and doing stretching exercises may also help. An over-the-counter nonsteroidal anti-inflammatory drugs (NSAIDs) can relieve swelling and pain. These medicines include aspirin, ibuprofen (brand names: Motrin, Advil) and naproxen (brand name: Aleve). In more severe cases, your doctor might inject your wrist with a corticosteroid, which reduces inflammation and pain.

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# Tips on relieving carpal tunnel syndrome

• Prop up your arm with pillows when you lie down.

- Avoid overusing the affected hand.
- Find a new way to use your hand by using a different tool.
- Try to use the unaffected hand more often.
- Avoid holding your wrists in a downward bent position for long periods of time.

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# What if these treatments don't help?

In some cases, surgery is needed to make the symptoms go away completely. The surgery involves cutting the ligament that may be pressing on your median nerve. You'll usually get back the normal use of your wrist and hand within a few weeks to a few months after surgery.

Doing the hand, wrist and finger exercises that your doctor tells you to do after surgery is very important. Without exercise, your wrist may get stiff and you may lose some use of your hand.

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# Can I prevent carpal tunnel syndrome?

Yes. See the box below for some tips on preventing carpal tunnel syndrome.

Many products you can buy -- such as wrist rests -- are supposed to ease symptoms of carpal tunnel syndrome. No one has proven that these products really prevent wrist problems. Some people may have less pain and numbness after using these products, but other people may have increased pain and numbness.

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# Things that may help prevent carpal tunnel syndrome

- Lose weight if you're overweight.
- Get treatment for any disease you have that may cause carpal tunnel syndrome.
- If you do the same tasks over and over with your hands, try not to bend, extend or twist your hands for long periods of time.
- Don't work with your arms too close or too far from your body.
- Don't rest your wrists on hard surfaces for long periods of time.
- Switch hands during work tasks.
- Make sure the tools you use aren't too big for your hands.
- Take regular breaks from repeated hand movements to give your hands and wrists time to rest.
- Don't sit or stand in the same position all day.
- If you use a keyboard a lot, adjust the height of your chair so that your forearms are level with your keyboard and you don't have to flex your wrists to type.

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