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 gives you feeling in your thumb, and index, middle and ring fingers. But when other tissues in the carpal tunnel, such as ligaments and tendons, get swollen or inflamed, they press against the median nerve. That pressure can make part of your hand hurt or feel numb.

What leads to 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, violinists and mechanics. Hobbies such as gardening, needlework, golfing and canoeing can sometimes bring on the symptoms.

Carpal tunnel syndrome is linked to other things too. It may 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 common during the last few months of pregnancy.

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 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.

Symptoms of carpal tunnel syndrome

- Numbness or tingling in your hand and fingers, especially the thumb and index and middle fingers.
- Pain in your wrist, palm or forearm.
- More numbness 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.
- More pain when you use your hand or wrist more.
- Trouble gripping objects.
- Weakness in your thumb.

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.

How is carpal tunnel syndrome treated?

If carpal tunnel syndrome is caused by a medical problem, your doctor will probably first treat that problem.

Your doctor may ask you to rest your wrist or change how you use your hand. Your doctor 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, massaging the area and doing stretching exercises may help too.

Tips on relieving carpal tunnel syndrome

- Prop up your arm with pillows when you lie down.
- Avoid using your hand too much.
- Find a new way to use your hand by using a different tool.
- Try to use the other hand more often.
- Avoid bending your wrists down for long periods.

## What about medicine?

Your doctor may suggest that you use a medicine such as ibuprofen (one brand name: Motrin), naproxen (brand name: Aleve), ketoprofen (brand name: Orudis) or aspirin to help ease the pain.

Your doctor may give you a shot in the carpal tunnel with a drug such as cortisone. This may help stop the swelling and inflammation and ease the pain. But the relief may not last.

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 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.

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. Some people may have less pain and numbness after using these products. But other people may have worse symptoms. No one has proved that these products really prevent wrist problems.

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 with your hands over and over, try not to bend, extend or twist your hands for long periods.
- 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.
- Switch hands during work tasks.

- Make sure your tools 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.