



PATIENT FACT SHEET

Carpal Tunnel Syndrome



CONDITION DESCRIPTION

Carpal tunnel syndrome is a common nerve disorder that may interfere with hand strength and sensation, causing a decrease in function. Carpal tunnel syndrome is more common among women and middle-aged or older people. It usually affects one hand, but may occur in both. The median nerve and flexor tendons pass through the carpal tunnel on the inner wrist. When the median nerve is squeezed, it slows or blocks nerve

impulses. Because this nerve provides muscle function and feeling in the hand, this can cause numbness, weakness or loss of function. Carpal tunnel syndrome may occur in people who are pregnant, overweight, or have diseases like arthritis or diabetes. Repetitive hand activity may not cause carpal tunnel syndrome, but may worsen symptoms.



SIGNS/ SYMPTOMS

Symptoms range from mild, occasional numbness in fingers to weakness in hand, and loss of feeling or function in the hands. Symptoms often appear in the morning, but may happen at other times. Symptoms may worsen with hand activities like driving, holding a book or grasping items. Tasks like buttoning a shirt become difficult, and people with carpal tunnel may often drop things. Patients may shake their hands to try to relieve pain, and sense swelling when none is present. Diagnosis

includes testing hands, fingers and thumbs for signs of muscle weakness. The doctor may prick the skin to test for loss of sensation, bend the wrist at a 90-degree angle (Phalen test), tap it with a reflex hammer to cause electric sensation (Tinel sign) or do nerve conduction testing. Ultrasonography and magnetic resonance imaging (MRI) may show median nerve swelling, tunnel wall abnormalities, or show why the nerve is compressed.



COMMON TREATMENTS

Treatments for pain relief include medications like acetaminophen (Tylenol), and nonsteroidal anti-inflammatory drugs like ibuprofen (Advil, Motrin) and naproxen (Aleve, Naprosyn). Cortisone injected into the carpal tunnel may relieve pain for weeks or months, and shots can be repeated. If hypothyroidism or rheumatoid arthritis are causing carpal tunnel syndrome, treating

those diseases may relieve symptoms. If other treatments do not provide symptom relief, surgery called carpal tunnel release can be performed to open the carpal tunnel and relieve pressure on the median nerve. In severe cases, surgery may be done right away. Both open surgery and endoscopic surgery are used for carpal tunnel release.



CARE/ MANAGEMENT TIPS

Carpal tunnel syndrome numbness and tingling may be mild at first, so people may not seek medical help or treatment. In these cases, the disease may progress to persistent numbness and burning. In severe, chronic cases, muscle at the base of the thumb on the palm side may lose mass. This can lead to hand weakness, impaired use of the hands, and loss of hand sensation

due to permanent muscle and nerve damage. So it is important to seek medical attention for carpal tunnel syndrome symptoms early and begin treatment. For mild carpal tunnel syndrome, splints available at drugstores may be worn on the affected wrist at night during sleep. This helps keep the joint straight and reduce pressure on the median nerve.

Updated March 2019 by Suleman Bhana, MD, and reviewed by the American College of Rheumatology Committee on Communications and Marketing. This information is provided for general education only. Individuals should consult a qualified health care provider for professional medical advice, diagnosis and treatment of a medical or health condition.

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