WHAT IS CARPAL TUNNEL SYNDROME?

CARPAL TUNNEL SYNDROME is where the nerve that runs through the wrist to the hand is compressed. This nerve is called the median nerve. It supplies the sensation to part of the hand and impulses to drive some of the muscles in the hand. The nerve runs under a ligament called the flexor retinaculum. This ligament binds the bones of the wrist (carpal bones) together and with them forms a tunnel.

WHAT CAUSES IT?

The usual reason is pressure on the median nerve. Abnormalities in the carpal bones such as arthritis. In most cases it is thickening of the ligament above the nerve called the flexor retinaculum. Disease that affects the nerve directly such a diabetes commonly produce symptoms. In Acromegaly (a Pituitary Disease) the ligaments thicken and produce symptoms. Some patients who develop swelling of the hands and feet from a bad heart or kidneys will also develop the symptoms. Damage to the wrist from accidents will also produce the symptoms. Often there is no specific cause.

WHO GETS IT?

Women usually get it far more commonly than men. Pregnant women frequently develop it and it usually gets better after delivery but may recurr as you get older. If you perform heavy manual work the chance of developing it are higher.

DISEASE INFORMATION

CARPAL TUNNEL SYNDROME

CROSS SECTION THROUGH WRIST

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WHAT ARE THE COMMON SYMPTOMS?

1. Numbness in the fingers
   The fingers involved are usually the ones on the thumb side of the hand. This because the nerve goes to this side. A different nerve goes to the little finger side of the hand.
2. Pain in the fingers
   This is usually the same fingers that go numb. The pain usually comes before the numbness.
3. Weakness in some functions of the hand.
   The grip is not as good.
4. Symptoms worse at night.
   When the hand stops moving fluid builds up and the fingers get worse, typically this is at night. Hanging them down or shaking them may help.
5. Symptoms worse when the wrist is held at certain positions such as when using a computer or driving.

HOW DO YOU DIAGNOSE CARPAL TUNNEL SYNDROME?

Your local doctor will usually make the diagnosis based on the symptoms that you are complaining of. He may send you for special electrical tests on the nerves in your arm called Nerve Conduction Studies.
If the nerve is affected then it takes longer for the impulses to cross the wrist and they are dampened as they cross. The test will confirm the diagnosis.
Some people will have symptoms in both hands but one is usually worse than the other. If he does not send you for the test he will send you to a neurologist or a neurosurgeon for an opinion. The neurosurgeon sends you to a Neurologist to perform the test.

HOW DO YOU TREAT CARPAL TUNNEL SYNDROME?

Usually the first thing to do is to find if anything is making the symptoms worse. These are then avoided.
Dietetics help you produce urine can help are tried.
Splints on the wrist help some people.
If you are a diabetic better treatment of your sugar level may help.
An injection of steroids around the nerve may be tried in some circumstances but does not always work. The symptoms may get better on their own without any treatment.

The symptoms usually progress slowly if they do get worse.
Everything is usually tried prior to considering surgery.

WHAT IS THE REASONS FOR HAVING AN OPERATION?

The commonest reason is that the symptoms in your hand/s have been causing significant discomfort or that you have been getting worse. Usually non operative therapy has failed.

WHAT ARE THE TYPES OF OPERATION?

1. Open Carpal Tunnel Decompression with incision over the nerve
2. Endoscopic Carpal Tunnel Decompression with two small cuts to allow the endoscope in to decompress the nerve