Carpal Tunnel Syndrome
Carpal tunnel syndrome is a common, painful disorder of the wrist and hand. It is caused by pressure on the median nerve in your wrist. Treatment is usually effective.

**Who does it affect?**

The syndrome affects about 1 in 1,000 people each year. Most cases are in people aged 40-60 but it can occur at any age. Women are affected 2-3 times more than men. Carpal tunnel syndrome can also occur during pregnancy.

**What causes Carpal Tunnel Syndrome?**

In most cases it is not clear why it occurs. People who use their hands and wrists repeatedly in the same way (for example, illustrators, carpenters, and assembly-line workers) tend to develop carpal tunnel syndrome. Pressure on the nerve may also be caused by a fracture or other injury, which may cause inflammation and swelling. In addition, pressure may be caused by inflammation and swelling associated with arthritis, diabetes, and hypothyroidism.

**What are the symptoms?**

- Pain, numbness, tingling or burning in your hand and wrist, especially in the thumb and index and middle fingers; pain may travel up into the forearm.
- Increased pain with increased use of your hand, such as when you are driving or reading the newspaper.
- Typically symptoms are worse at night and may wake you up.
- Weak grip and tendency to drop objects held in the hand.
- Sensitivity to cold.
- Dryness of the skin.
- Muscle deterioration especially in the thumb (in later stages).

**How is it diagnosed?**

The syndrome can be diagnosed from your history and an examination. During the examination your doctor may tap the inside middle of your wrist over the nerve. You may feel pain or a sensation like an electric shock. You may be asked to bend your wrist down for one minute to see if this causes symptoms. You may require further tests such as blood tests, an x-ray or an electrical stimulation test of the nerves.
How is it treated?

Treatment focuses on relieving irritation and pressure on the nerve in your wrist. To relieve pressure you could try:

- **Changing the way you use your hand**, avoiding overuse of your hand. If you do very repetitive work with your hands, make sure that your hands and wrists are comfortable when you are using them. Take regular breaks from the repetitive motion. Avoid resting your wrists on hard or ridged surfaces for prolonged periods.

- **Changing your workstation** (the position of your desk, computer, and chair) to one that irritates your wrist less. Use the other hand when using the computer mouse, for example.

- **Wearing a wrist splint**. This avoids bending your wrist, especially at night. You can also try elevating your arm with pillows when you lie down.

- **Exercises** to improve your wrist movement and function may also be of benefit. You may do all of these exercises right away. If they cause pain then you should reduce the number of times you do the exercise until you are pain free.

If the exercises make the pain worse then reduce the number of times you do the exercises. **If at any time your symptoms change or worsen you must stop any exercises / self-management and consult your doctor.**

**Wrist Range of Motion:**
Holding each position for 5 seconds, aim for 3 sets of 10 for each:
- **Flexion** - Gently bend your wrist forward.
- **Extension** - Gently bend your wrist backward.
- **Side to side**: Gently move your wrist from side to side (a handshake motion).
Tendon glide:  
Start with the fingers of your hand held out straight. Gently bend the middle joints of your fingers down toward your upper palm. Hold for 5 seconds. Do 3 sets of 10.

Scapular squeeze:  
While sitting or standing with your arms by your sides, squeeze your shoulder blades together and hold for 5 seconds. Do 3 sets of 10.

Grip strengthening: Squeeze a rubber ball and hold for 5 seconds. Do 3 sets of 10.

What if the symptoms are ongoing?  
You should speak to your doctor if these measures are not helping. They may suggest:

- Referral to Physiotherapy
- A Steroid (cortisone) injection – this can be given into the wrist area and acts to reduce inflammation within the carpal tunnel – your doctor may be happy to do this or may need to refer you to a specialist.
- In some cases a referral for surgery may be necessary.
References

Produced with cooperation from Buckinghamshire Healthcare NHS Trust and Musculoskeletal Integrated Care (MusIC) Service

Content in association with:

www.arthritisresearch.org

www.patient.co.uk

www.summitmedicalgroup.com

June 2012