

## **Carpal Tunnel Syndrome – conservative management Information for patients**

If you have been diagnosed with Carpal Tunnel Syndrome (CTS) this leaflet will help to understand the condition, symptoms and the causes. It will also inform of how the diagnosis is made and the treatment options available.

- What is Carpal Tunnel Syndrome?

CTS is a common condition where pressure on the median nerve causes uncomfortable pins and needles, tingly sensation and in more advanced cases, also numbness and weakness. The median nerve runs down from the neck, down to the wrist and through a tunnel called the carpal tunnel into the hand.

The carpal tunnel is formed by the wrist bones in a “U” shape and a wide ligament across the top to form the roof of the tunnel.

- What causes CTS?

CTS can occur from irritation of the median nerve, by increased pressure on the carpal tunnel. Most cases can occur without any exact cause. However, there are some factors that can be linked to CTS such as diabetes, pregnancy, hypothyroidism, secondary to wrist fractures, some forms of arthritis.

Some patients report increased incidence of CTS symptoms after heavy activity. Many patients with CTS reported an increase of their symptoms at night in early stages, and with advancing in condition, they started to experience symptoms during day time including increase of frequency.

- How CTS can be treated?

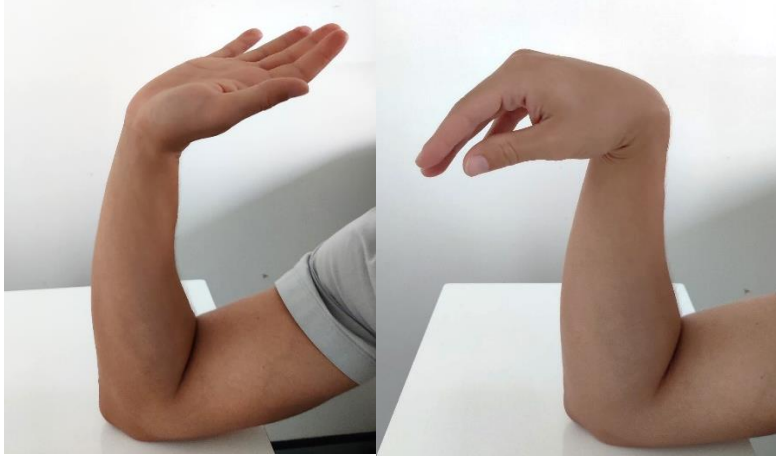
- Splinting - you may be provided with night time splint to hold the wrist in a neutral position, reducing the compression or irritation of median nerve (normally splint at night for 6 - 12 weeks)
- Therapy – alongside splinting, in therapy are included exercises such as: nerve glides, ergonomic advice and education
- Injection – a local cortisone steroid injection (CSI) administered in the carpal tunnel can give relief from symptoms.
- Surgery – if conservative management and CSI did not work, or the CTS is quite severe, surgery may be an option, which normally involves a small cut across the carpal ligament at the base of the palm, to make more room for the nerve. This is completed through the orthopaedic service.



## Simple exercises

Wrist range of movement- bend wrist forward and back:

- Rest your elbow on a table
- Gently bend your wrist downwards (aiming for palm of hand towards forearm)
- Then aim to bend the wrist backwards (aiming for palm up)
- Do \_\_\_\_ repetitions



Wrist stretch:

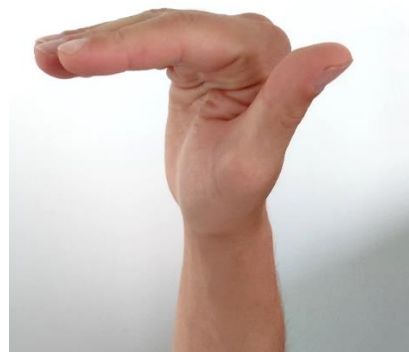
- Put your hands together under your chin in a prayer position
- Push your hands down to your waist **until** you feel a comfortable stretch
- Hold up to \_\_\_\_ seconds
- Do \_\_\_\_ repetitions

Finger exercises:

1. Straight fingers- straighten all your fingers



2. Table top – Keeping your fingers and wrist straight, bend at your knuckles



3. Straight Fist – Bend knuckles and middle joints, keeping tips straight.



4. Make a hook by bending the small joints with knuckles straight



5. Full fist- Bend all joints of the fingers into a full fist



#### Medial nerve glide:

- Stand with your affected hand out to the side, to shoulder level (if able) with palm up and elbow bent
- Slowly begin to straighten the elbow to the side, keeping your wrist extended, until you reach a comfortable point of tension
- Do not push any further
- Lift your wrist up (flex) and tilt your head away from the arm
- As you extend wrist (stretch) tilt your head towards the arm
- Do \_\_\_\_\_ repetitions

