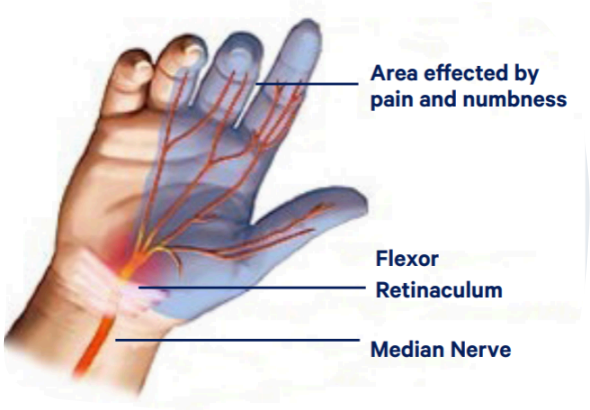
Merivale Hand Clinic

Carpal Tunnel Syndrome

WHAT IS CARPAL TUNNEL SYNDROME AND HOW DOES IT HAPPEN?

Carpal tunnel syndrome is caused by pressure on the median nerve as it goes through a narrow tunnel in your wrist. The median nerve begins at the spinal cord and travels down the inside of your arm into your hand. The nerve gives feeling to the skin and movement to the muscles in the area shown below. The bottom and sides of the carpal tunnel are made up of wrist bones, and the top of the tunnel is a strong, thick ligament. The median nerve and nine tendons that bend the fingers and thumb run through the tunnel. Swelling or thickening of the tendons or ligament can increase the pressure in the tunnel. Carpal tunnel syndrome is a common problem. Pressure or stretching of the nerve can reduce the flow of blood to the nerve, causing symptoms.



Carpal tunnel syndrome can be caused by activities or jobs that involve awkward wrist movements along with strong repetitive gripping, a wrist fracture or arthritis in the thumb or wrist, medical conditions such as diabetes, rheumatoid arthritis, obesity or hypothyroidism, a family history of the condition or pregnancy (because there is more fluid in the carpal tunnel).

When the median nerve has pressure on it you may experience tingling, pins and needles and/or numbness in the thumb, index or middle finger. In more severe cases, you may start to notice your hand feels weak and clumsy, and tasks like doing up buttons become more difficult.

Your symptoms may get worse with:

- Lots of gripping during activity or using your hand with your wrist bent.
- Prolonged postures (esp slouching, rounded shoulders)
- Sleeping with your wrist bent.

HOW IS CARPAL TUNNEL SYNDROME TREATED?

Hand Therapy

Your hand therapist will assess your wrist, and treatment may include

- A splint to keep your wrist in a good position while you are sleeping or when using your hand.
- Advice about how to avoid or change activities that bring on your symptoms.
- Exercises to help the nerve and tendons glide within the tunnel.
- Strengthening exercises for your hand and wrist.
- Advice and exercises for posture if this effects your symptoms



Injection and Surgery

If your symptoms do not get better, your hand therapist may refer you to a doctor for a steroid injection. A steroid injection aims to take pressure off the median nerve by reducing inflammation in the carpal tunnel.

You may also be referred to a surgeon who will assess your symptoms and discuss whether you need an operation. The operation aims to reduce the pressure on the nerve where it passes through the tunnel at the wrist. Surgery is usually done using a local anaesthetic and/or a nerve block. The surgery is called a carpal tunnel release. An incision is made in the wrist and palm, and the surgeon identifies the flexor retinaculum (a strong band of tissue within the carpal tunnel that wraps the median nerve and the tendons that move the fingers). The flexor retinaculum is cut and released, which relieves the pressure on the median nerve. The skin is stitched back together, and a dressing is applied. Your surgeon will tell you about the type of operation you will need. After the operation, your hand therapist will show you how to manage your scar and guide your rehabilitation.

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WHAT CAN I EXPECT FROM MY HAND THERAPY REHABILITATION?

You should feel an improvement in your symptoms in 4-6 weeks with hand therapy or after surgery. If you have had your symptoms for a long time, it could take up to 6 months or more for the nerve to recover.

Do

- Remember to wear your wrist splint at night.
- Avoid or modify the activities that bring on your symptoms.
- Rest your arm between activities, especially if you are doing anything heavy or repetitive.

Do Not

- Do lots of forceful gripping at one time.
- Hold your wrist bent for long periods.

WHAT SHOULD I LOOK OUT FOR?

- Watch for activity that causes pain, swelling, or numbness in your hand or arm; avoid it and tell your hand therapist.
- If your splint is uncomfortable or rubbing, book an appointment to see your hand therapist.
- If things are getting worse, book an appointment to see your hand therapist

WHAT WILL HAPPEN IF I DO NOT HAVE TREATMENT?

If the nerve continues to have pressure on it, the feeling in your hand will get worse. The muscles in your hand may become weak. This will affect your ability to do everyday tasks. If you do not get treatment, the nerve may become permanently damaged.

SYMPTOMS IN PREGNANCY

Swelling is one of the most common symptoms of pregnancy. During pregnancy, blood volume doubles, and the extra fluid increases pressure in the carpal tunnel. Research has found that 85% of women will have their symptoms resolve within 6 weeks of the birth of their child. Only 15 % will have ongoing tingling or numbness one month after the birth of their baby.

Generally, it is recommended to wait 2 months after pregnancy to have surgery. This is because for most women, symptoms will resolve

CONTACT DETAILS AND REFERENCES

Your hand therapist is_____

Merivale Hand Clinic (03) 3559775

www.aaos.org
www.assh.org