HKSH Orthopaedic & Sports Medicine Centre

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Saturday: 11:00 am - 3:00 pm

Closed on Sundays and Public Holidays

by Appointment





Carpal Tunnel Syndrome



養和骨科及運動醫學中心

What is Carpal Tunnel Syndrome?

There is a space in the wrist called the carpal tunnel, through which the median nerve and nine tendons pass from the forearm into the hand.

Carpal tunnel syndrome is a condition when the pressure within the carpal tunnel builds up and causes compression on the median nerve.

Symptoms and Signs

Patients may feel numbness, tingling and pain in the hand and fingers. Usually the first three fingers on the thumb side are affected. It often gets worse at night, making one shake his hand for relief. In serious cases, the thumb ball muscles will become wasted.

Causes

Increase in pressure within the carpal tunnel may occur due to the following conditions:

- Edema due to hormonal disturbances this situation occurs most commonly in women during the perimenopausal period. Other causes include pregnancy and low thyroid function
- 2. Fractures and dislocations around the wrist joint
- Arthritis including rheumatoid arthritis and gouty arthritis
- Overuse of the wrist and fingers leading to swelling of the lining of the flexor tendons, i.e. tenosynovitis



Thumb ball muscles become wasted



Region with numbness and tingling pain

Treatment

- Rest and avoid overuse of the hand and wrist
- Use a splint to keep the wrist in neutral position
- · Sometimes steroid injections can help

Surgical decompression of the median nerve becomes necessary. Nerve conduction velocity study is performed before surgery if needed.

Operation

The operation is conducted under regional or general anaesthesia. The ligamentous structure compressing against the median nerve will be released.

Nowadays, the minimally invasive method using a small incision at the wrist with endoscopic instruments can achieve good relief of symptoms. The scar heals much better and the recovery is faster.

If the wrist is much deformed or the tendon sheaths are much thickened, open carpal tunnel release will be performed.

Possible Complications

- · Wound infection or poor healing
- Soreness around the incision may last for several weeks or months
- Recurrence of the symptoms
- Damage to the median nerve or its branches

