

# CARPAL TUNNEL SYNDROME

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**The problem.**

Carpal tunnel syndrome is caused by compression of the median nerve at the wrist. It can occur following trauma, during pregnancy and is associated with conditions such as arthritis, but commonly the cause cannot be identified. It results in pins and needles, numbness and weakness in the hand, especially of the thumb, index, middle and ring finger, particularly at night.

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**What does treatment involve?**

The diagnosis is made with a combination of history, clinical examination and nerve conduction tests. You will be referred for these nerve tests if the surgeon feels it appropriate. If symptoms are mild it can be treated with a steroid injection and a splint. This is often effective, but sometimes the results can be temporary. If this is the case then surgery will be recommended. Surgery is usually performed under a local anaesthetic. Once the injection is administered you should not feel any pain. When the hand is numb an incision is made in the palm and the tight band compressing the nerve is released. The wound is closed with non-dissolving sutures which are removed approximately 2 weeks later. You will have a bulky dressing in place but will be able to use the hand almost normally. The surgery usually takes about 15 minutes.

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**What happens after surgery?**

You will usually be able to go home later the same day. It is very important that you keep the hand elevated to reduce swelling and pain. The local anaesthetic will last a few hours. You will be provided with a sling and pain killers. It is important you keep the dressing clean and dry for at least the first week and you can shower with a plastic bag over the hand. The sutures will be removed at approximately 2 weeks. You should have normal hand function after about 4-6 weeks.

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**What are the advantages?**

In most instances the unpleasant sensation of pins and needles will resolve very quickly and your hand will return to normal. If, however, the nerve has been badly compressed then it may not return to normal, but you should notice an improvement.

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**What are the complications?**

Bleeding and infection following carpal tunnel surgery is rare. Sometimes a thick scar can develop, especially if the incision has been slow to heal. A small number of patients experience pain in the scar that may take several weeks to settle down. There is a small risk of injury to the nerve itself, but this is very uncommon. Rarely, a condition known as Chronic Regional Pain Syndrome can develop which is treated with intensive hand therapy.

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