

PERIPHERAL NERVE SURGERY



BRAIN & SPINE
CENTRE
SYDNEY

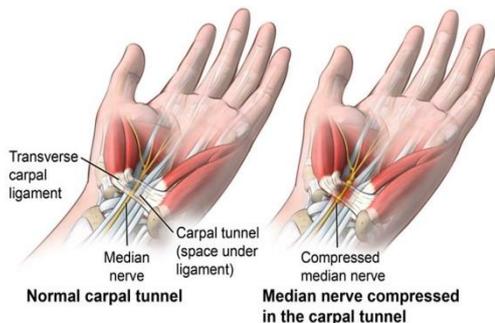
A peripheral nerve is a nerve which is outside the brain or the spinal cord. Peripheral nerves run through all parts of the body, supplying muscles and other organs.

REASONS FOR SURGERY

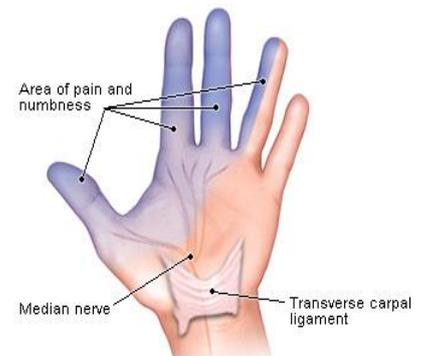
The most common causes of damage to a peripheral nerve are entrapment and compression. When a peripheral nerve passes through a very narrow area, it may become trapped and compressed. The longer the nerve is compressed it will become irritable and inflamed. This causes chronic pain, numbness, tingling and poor muscle strength. If a peripheral compressed surgery may be a treatment option with a good chance of restoring some or all of the nerve's function. Common surgeries to restore nerve function include: neurolysis, nerve transposition and neuroma resection.

The most common peripheral nerve entrapment syndromes are:

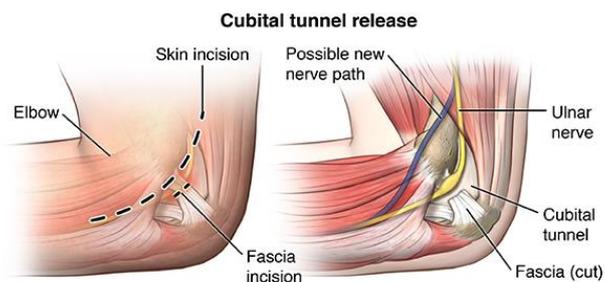
CARPAL TUNNEL SYNDROME



The carpal tunnel is a narrow passage where the median nerve and 9 tendons pass. When the contents of the tunnel swell, or the ligament forming the roof of the tunnel thickens it compresses the median nerve – causing carpal tunnel syndrome



CUBITAL TUNNEL SYNDROME



The ulnar nerve is vulnerable to compression where it passes behind the elbow. It is the same nerve that is affected when you strike your “funny bone”. Compression of the ulnar nerve can cause hand pain (particularly in the ring and little fingers) and general weakness of the hand.

RISKS OF SURGERY

All surgery has some risks and these vary between procedures. The risks with surgery can be related to the anaesthetic, medication or the operation. Risks related to the anaesthetic depend on your other medical issues and to the medications used and include heart or lung problems, clots in the lungs or legs, infection and bleeding. Generally, surgery is safe and major complications are uncommon. The chance of a minor complication is around 3 or 4%, and the risk of a major complication is 1 or 2%. Over 90% of patients should come through their surgery without complications. All surgeries carry a small risk of something catastrophic such as death.

The risks involved with peripheral nerve surgery include but are not limited to poor recovery, delayed healing to the nerve or the wound site, damage to the nerve leading to further weakness and numbness, persistent or recurrent

symptoms, excessive swelling and stiffness near the joint (this may be corrected with physiotherapy), permanent numbness at the operation site, risk of complex regional pain syndrome and adjacent structures may be injured.

PROCEDURE

This surgery would involve either general anaesthetic so that you are asleep throughout the procedure. The most appropriate approach and technique will be discussed with you prior to surgery. There are several methods to surgically treat a peripheral nerve entrapment or compression.

The surgeon makes an incision in the skin above the nerve and;

Neurolysis – After securing the nerve out of the way, the tissue is cut that is compressing the nerve. This will relieve the pressure on the nerve by providing more space.

Nerve transposition- the compression may be best relieved by freeing the nerve and then moving it several centimetres to a nearby site, usually under muscle where it is secured.

Neuroma resection – a neuroma is an area of damaged nerve that may have abnormal scarring and swelling. If testing shows that the nerve is not functional, it is best to remove the neuroma.

The skin is sutured and a dressing placed on the incision site.

DISCHARGE

The procedure is usually completed as day surgery. Depending on how you are feeling you may be able to go home after a few hours. You will be given a prescription for pain relief. Tingling in the limb may persist for weeks. Physiotherapy may be required and will be arranged by your surgeon. During recovery the area may be weaker and slightly painful, although discomfort gradually improves with time.

WOUND CARE

Bruising of the area is common. You can use your limb immediately after surgery for very light duties such as eating and dressing. After 72 hours, please remove the dressing(s). You may shower and then replace the dressing daily for one week. After that week, remove the dressing and leave it open to air. If you have Steri-Strips on your incision, they will begin to curl in 7 to 14 days. The curls may be trimmed. Please do not pull on the Steri-Strips but allow them to fall off on their own. If you have sutures or staples, they must come out in 10 to 14 days. Do not get the wound wet for 72 hours after surgery. Do not submerge the incision site(s) underwater for 1 month after surgery. Do not vigorously scrub incision site after removal of the surgical dressing. Use a mild soap to shower.

Avoid heavy lifting and repetitive activities for 6 weeks after surgery. Your return to work will depend on your occupation. Your surgeon will advise when you can return to driving.

FOLLOW UP

You will need to be seen again by your neurosurgeon 6 weeks after surgery for your post-operative review.