

Nerve Transfers

What are nerve injuries?

A peripheral nerve is any nerve that carries messages from the brain and spinal cord to the rest of the body. There are 3 main types of peripheral nerves:

- *Sensory nerves*: nerves which carry messages about sensations such as pain and heat from the body to the brain or spinal cord.
- *Motor nerves*: nerves which carry messages about function from the brain and spinal cord to the muscles telling them to contract to move the body.
- *Mixed nerves*: nerves which have both sensory and motor components.

No matter which type of nerve it is, each nerve consists of a grouping of nerve cells known as fascicles surrounded by a protective sheath. Injuries can occur from the nerve being compressed, stretched, cut, or torn. They can even occur when the nerve root is pulled out of its connection to the spine cord as in cases of severe brachial nerve injury.

What is nerve transfer?

Nerve transfer is a surgical procedure for severe nerve injuries which results in loss of function in an extremity. It is essentially a “re-wiring” of the peripheral nerves. In these cases, the affected muscle does not receive any electrical input from the damaged nerve, so a portion of a normal, functioning nerve near that affected muscle is transferred to the distal end of the injured nerve, bypassing the injured segment, to restore its communication between the brain and spinal cord.



What is the surgical recovery?

Nerves recover very slowly so the process of recovery after surgery can take up to 1-2 years. Splints may be used to protect the area and physical or occupational therapy is started and continued as long as possible. You will have regular visits to assess sensation and function and may even have a repeat EMG/NCS to evaluate progress.