

# Scottish National Brachial Plexus Injury Service

### What is Tendon Transfer Surgery?

A tendon attaches muscle to bone. Tendon transfer is a type of surgery to try and improve the function of your hand that has lost some or all it its use. The surgeon transfers a working healthy tendon to replace a damaged tendon to restore the action that has been lost.

#### Why do I need Tendon Transfer Surgery?

When a certain muscle function is lost because of a nerve injury, tendon transfer surgery may help. When a nerve is injured and cannot be repaired, then the nerve no longer sends signals to certain muscles. Those muscles are paralyzed and their muscle function of movement is lost. Tendon transfer surgery can try to replace that function. Tendon transfer surgery can treat lost muscle function as a result of common nerve injuries such as radial nerve, ulnar nerve, or median nerve injury.



This picture shows a damaged tendon and a healthy tendon transferred

## What happens during Tendon Transfer Surgery?

Each muscle has a starting point (origin), and tapers down from its muscle belly into a tendon that then attaches onto bone (insertion) in a specific place. When the muscle fires (contracts), it causes a certain motion (action).

During tendon transfer surgery, the surgeon leaves the origin of the muscle, nerve supply and blood supply to the muscle all in place. The surgeon detaches the tendon which connects the muscle to the bone and sews it into a different place. It can be sewn into a different bone, or it can be sewn into a different tendon. Once transferred, when the muscle fires, it will produce a different action, depending on where it has been moved to.

Your surgeon will discuss with you what type of surgery you will require and whether this will be as a day case or as an inpatient and in which hospital this may take place.

## What is the aftercare of Tendon Transfer Surgery?

After your surgery, we will give you instructions which you must follow. When a tendon is transferred and sewn into another position, the tendon transfer will need a period of time to heal, usually about 4-8 weeks. You may need a splint or plaster cast for a few weeks to stop you moving your arm and hand. If you move your limb too soon this can lead to a rupture of the tendon.

When your surgeon feels the tendon transfer has healed enough, they will refer you for physiotherapy. You will need to do exercises to strengthen the muscle and the physiotherapist will teach you how to use the new tendon function. You will need to follow these instructions, if you do not exercise, or leave it too late this can lead to excessive scarring of the tendon which can lead to stiffness.

Your Consultant will discuss your individual case with you. They will explain the risks and benefits of tendon transfer surgery.



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