

# **Understanding your nerve injury – what you can do after surgery** (page 1 of 3)

This leaflet will help you to understand some of the immediate changes that you will notice in your arm and hand as a result of your nerve injury and precautions you will need to take. It will outline some basic exercises and tasks that can help in the initial phase of your injury.

Your therapist will provide you with ongoing supporting information as you progress through your recovery.

## **What happens when your nerve is repaired?**

A nerve is like an electric cable with a thick outer protective layer and bundles of small fibres running through the centre. If it is cut or injured it will need to be repaired through surgery. It is likely that your surgeon will only be able to repair the outer protective layer as the inner nerve fibres are too small.

If you need your information in another language or medium (audio, large print, etc) please contact Customer Care on 0800 374 208 or send an email to: [customercare@salisbury.nhs.uk](mailto:customercare@salisbury.nhs.uk)

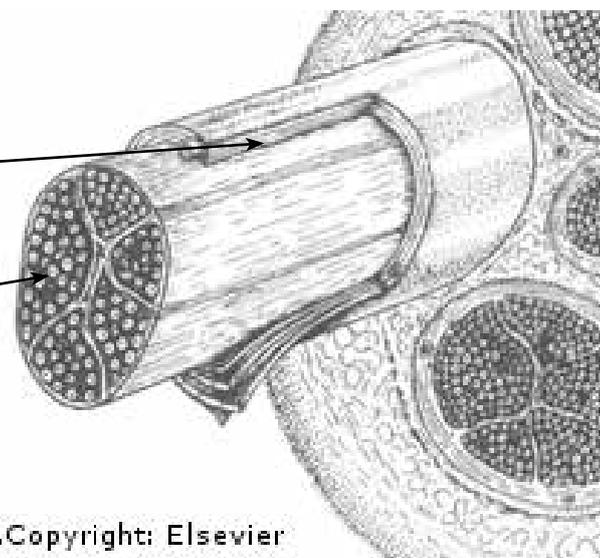
You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital.

Please complete The Friends & Family Test to tell us about your experience at: [www.salisbury.nhs.uk/FriendsFamily](http://www.salisbury.nhs.uk/FriendsFamily) or download our App from the Apple App store or Google Play Store.

The evidence used in the preparation of this leaflet is available on request. Please email: [patient.information@salisbury.nhs.uk](mailto:patient.information@salisbury.nhs.uk) if you would like a reference list.

Outer layer of nerve

Nerve fibres



Once the outer layer has been repaired the small nerve fibres have a chance to grow down the length of the cable back towards your hand, to plug into special receptors which supply power to the muscles and sensation to the skin. This can take many months or even years.

As a consequence of your injury you may not have normal feeling in certain parts of your hand. You may notice that you are unable to move your hand or fingers as you used to.

Due to this lack in sensation it is very important that you are aware of the risk of burning or cutting yourself on the parts of your hand which

lack feeling. You will need to use your eyesight to guide and monitor your hand to make sure that you do not put yourself at risk of injury.

## What can I do immediately after my surgery to help myself?

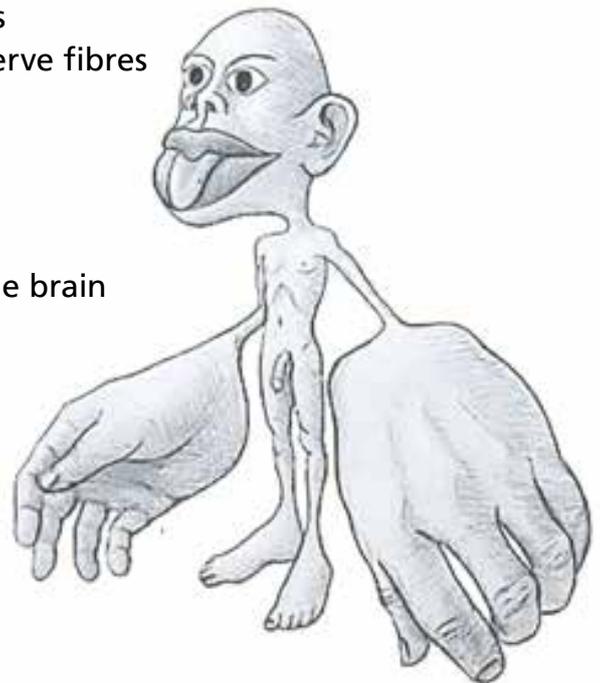
Your hand is an extremely important part of your body and sends information to your brain about your environment and tasks that you are completing. Due to this constant relay of information your brain has very established communication pathways with your hand. After your nerve injury this communication stops for a period of time until the nerve fibres begin to re-grow.

### Your brain's image of your virtual body

The hands, lips and tongue appear much bigger to the brain than they really are.

You can do some very basic activities, called sensory re-education, to help maintain your brain and hand link which will make your recovery and interpretation of recovering sensation easier in the long term.

Your therapist will demonstrate and explain which of the activities from the list below need to be completed and how often you should do them.



### Activities to complete with the flashcards

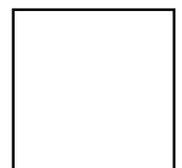
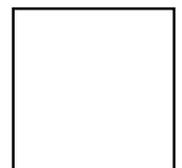
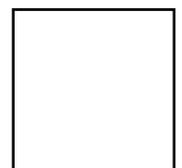
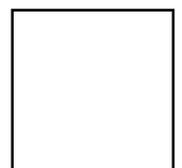
Imagine moving your injured hand, initially moving the fingers then the thumb and wrist. Build up to imagining moving it into the different positions demonstrated on the flashcards. Try to create a strong visual picture in your head.

Imagine using your hand to touch the range of textures shown in the flashcards. Try to imagine what exactly you might experience, for example is the texture rough, smooth, prickly, cool.

### Activities to complete without flashcards

Watch other people move their hands, particularly pay attention to the movement of the hand which matches your injured limb. Watch them perform everyday tasks and think about the sensations that they are feeling.

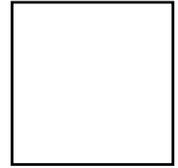
Look through magazines or newspapers and circle the hands on people which correspond to your injured hand.



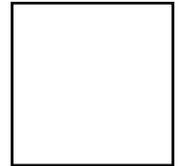
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Whilst watching and concentrating on your hand, gently touch or lightly tap through your dressings over the areas of your hand with no sensation.



Once your dressings have been removed and you can access the exposed areas of skin which have no feeling you can progress to working with a range of different textures e.g. cotton wool, towelling, Velcro. Gently stroke the texture over the same area on your uninjured hand and think about the qualities that you feel. Repeat this on the skin area on the injured side trying to remember and reinforce the sensations noted on the other side.



Please complete these exercises frequently throughout the day, a minimum of 4 times if possible. They will help to retrain the brain and hand link which is very important in your later recovery.

You will work through these exercises with the therapists based in the outpatient department once you are discharged home.

If you have any questions please contact your therapist:-

Name:..... OT/PT

Contact details: .....

