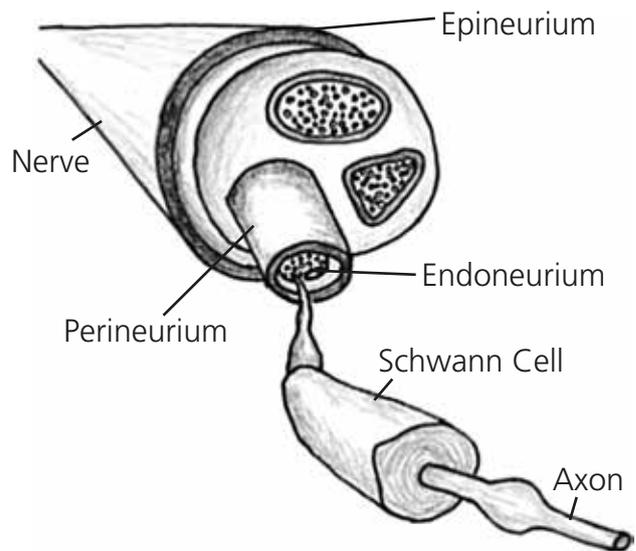


## Care of your Peripheral Nerve Repair

The **peripheral nerves** are a network of 43 pairs of motor and sensory nerves that connect the brain and spinal cord (the central nervous system) to the entire human body. The motor part of one of these nerves sends signals to your muscles to allow movement. The sensory part of the nerve sends signals to your brain about what your hand is feeling and touching.

This leaflet will tell you more about the damage, repair and rehabilitation process for your nerve injury.

- You have injured one of the peripheral nerves that provides sensation (feeling) and muscle power (movement) to your hand.
- You will need a splint to protect the nerve if it has been repaired by a surgeon.
- The outer part of the nerve (the epineurium - where it has been repaired) will take around 4-6 weeks to heal – you will need the splint during this time.
- The inner part of the nerve (axon) needs to grow back within its tube – this can take many months, so you will not regain sensation (feeling) or muscle power (movement) until the nerve grows to its destination. Even when it grows back, it may be muddled, so that you do not feel the skin exactly where it was touched.



To regain the best possible outcome after your nerve repair, it is important in the initial stages to do the following:

- **DO** protect the repair – the splint will protect the repair from being over-stretched, so keep it on as advised by your therapist.
- **DO** elevate your hand so that is higher than your elbow – this may help prevent swelling. You can elevate by keeping the hand up on a pillow so it is higher than your elbow, or keep it in a sling.
- **DO** check your skin condition regularly - in areas where you cannot feel the skin, check the splint is not rubbing. If the splint is rubbing, please let your therapist know.
- **DO** be aware that you may not be able to feel burns from hot or cold objects, and cuts from sharp objects - **BE CAREFUL!**
- **DO** be aware that your hand will feel clumsy if you cannot feel how much pressure to put through your fingers or thumb to grip an object.

- **DO** try to stop or reduce smoking as this can limit your potential nerve recovery.

If you cannot feel a part of your hand, your brain may begin to forget that part is there. To prevent this happening, it is good to think about your hand, and imagine your hand touching different textures, and imagining it in different positions. Also, touching the skin that has been affected is good, and as soon as your GP / nurse / therapist lets you know that your scar is healed, massage the scar - initially with moisturising cream (eg, Doublebase / Diprobase or E45 cream). Massaging with cream will help to soften the scar, and help prevent hypersensitivity.

Your therapist will be monitoring the sensation in your hand with a simple painless touch test; and the movements of your hand with muscle tests assessing the small muscles in your hand - these determine how your nerve is recovering. You may need to come in for assessments every 2-3 months for up to a year following your injury/surgery to monitor this.

You may need further splints to enable improved function of your hand – your therapist will assess whether these are necessary.

## Contact numbers

Hand therapy team..... **01392 402429**

If you have any problems over a weekend or after 5pm Monday-Friday, you will need to contact Otter ward on **01392 402807**.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

© **Royal Devon and Exeter NHS Foundation Trust**

Designed by Graphics (Print & Design), RD&E