

Sensory Education following Nerve Repair

Physiotherapy & Occupational Therapy

Who is this leaflet for?

This leaflet is for patients who have had nerve repair surgery to their hand. It explains how you can help your recovery by practising simple exercises to improve the function of your hand.

How can I help improve function in my hand?

The exercises described below will help to improve the function of your hand by 'retraining' the repaired nerves. This involves encouraging the hand to distinguish between different textures, shapes, pressures and weights for example.

What methods are used to retrain the nerves?

To encourage the nerves to repair properly you will need to work through a set of tasks in a specific order:

- First, the task is attempted with the eyes closed
- Second, open your eyes and check to see if the task was performed correctly
- If it was, close your eyes and attempt to carry out another task
- If incorrect, then repeat the same task with eyes open and commit to memory
- Finally, close your eyes again and attempt the same task to reinforce what you have just learned when your eyes were open.

Try not to proceed to the next stage until you have correctly identified the stimuli from the last stage.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Exercises

Before you begin:

- Create your own set of objects, but be careful not to include items with sharp edges that could cause harm
- Keep a few simple items in your pocket / hand bag to practice throughout the day
- Practice tasks at least once a day
- You will need a friend / relative to help you with some of the tasks.

1. Localisation (moving)

Use a blunt stimulus (e.g. the eraser on the end of a pencil)

Ask a friend to firmly move the eraser over the surface of the hand. Try and identify where they are touching you.

Start with firm pressure and once this is achieved, repeat with increasingly lighter pressure

2. Localisation (static)

As above, but keep the stimulus in one place on the hand

3. Tactile (weight)

Use tubes filled with varying amounts of sand and see if you can place them in weight order

4. Tactile (texture)

Use discs of varying textures (metal, plastic, fur fabric, wood, sandpaper, Velcro). Proceed to varying grades of sandpaper. Try and match one particular texture with one from a small group of textures

5. Tactile (shape - two dimensional)

Use plastic discs of varying shape

6. Tactile (shape - three dimensional)

Start with simple, fairly large everyday objects - ask a friend to hand them to you one at a time. Proceed to 'hiding' these objects in a background material.

Start with a fine background material such as rice grains. Progress to using smaller objects hidden in a coarser background material e.g. polystyrene foam shapes. Use sets of similar shaped objects of varying size and try to place them in size order.

Time limits can be set to make the task more complex

Function

Try and perform functional tasks (which do not involve sharp / hot materials) with your eyes closed.

Gradually build on this by making the task more complex and setting time limits

Are there any side-effects or precautions for these exercises?

Your therapist has assessed you as being safe to carry out these exercises. It is very unlikely that you will experience any ill effects. However if you should experience severe discomfort or pain, or any other new symptoms which you are worried about, please stop the exercises and speak to your Therapist.

Who can I contact if I have any concerns or questions about the exercises?

If you have concerns or queries about any aspect of these exercises please speak to your Therapist.

Name of therapist:.....

Contact telephone number:.....

Out of hours / emergency contact details:.....

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English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。