# The Royal Wolverhampton NHS Trust

# **Desensitisation Exercises**

Occupational Therapy & Physiotherapy

# Introduction

This leaflet is for patients who have been advised to carry out exercises to reduce hypersensitivity after hand injury or surgery.

# What is hypersensitivity?

The skin can become over sensitive to touch following an injury or surgery. This is due to the release of chemicals around the site of tissue damage or inflammation.

These chemicals stimulate the pain receptors in the skin which then send messages to the brain. This can make the skin feel oversensitive.

# How can I treat hypersensitivity?

Pain and light touch travel on the same nerve pathway. Deep pressure travels on a separate pathway. Deep pressure overrides pain and light touch, so by rubbing the skin firmly we reduce our perception of pain, tickle and itch.

To see how this works, try the following: tickle your arm very lightly, then rub it firmly, and tickle it again as before. It should feel less sensitive the second time.

The worst thing you can do is to avoid touching the sensitive area.

Try and use the hand as normally as possible.

Exercises must be done regularly and perseverance is required for them to be effective. They will cause some discomfort, but should not be too painful.

Desensitisation should start with pressure, vibration and percussion and then move on to friction / textures (see next page).

For the exercises to be effective you should spend a total of 90 minutes a day carrying out the techniques. Try and do two sessions a day.

## **Desensitisation Exercises**

- 1. Pressure
- Use a firm clean brush such as a nail brush or a tooth brush
- Brush slowly and very firmly across the sensitive area for 2-3 minutes

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.

- Avoid brushing your skin if it is damp (for example, when sweaty or after a bath) as the brushing will not be smooth.
- 2. Vibration
- Use a mini-massager or an electric tooth brush.
- Apply directly over the sensitive area and apply vibration for 5 minutes at a time.
- 3. Percussion
- Tap lightly on the area of your hand that is tender with your finger tip or the blunt end of a pencil
- Find the spot that is most tender
- Note the time and begin to tap rapidly (2-3 times a second), lightly and continuously on the most tender area
- Keep tapping without a break for 3 minutes or until you notice the feeling in the area changes. The area may feel numb or a little less tender
- Take a 5 minute break and then begin again. You may now find that a different area is now the tenderest spot.
- 4. Friction
- Find scraps of varying textured materials around the house e.g. cotton wool, clothes, towel, fur fabric, velcro, plastics, papers
- Order the textures according to how much discomfort they cause when rubbed against the sensitive area
- Begin with the least irritable texture and start outside of the area of sensitivity. Rub the texture against the skin until it becomes numb. Gradually work towards the area of greatest sensitivity
- Also try putting your hand in a container filled with different textured materials, for example, uncooked rice grains, raw pasta, clean gravel and moving the hand around in the material. To make this more interesting you can place other items in the containers and try to find them e.g. buttons, beads.

# Are there any precautions or side-effects for this therapy?

It is normal for you to feel strange sensations in your hand whilst carrying out these exercises – this is evidence that they are working! However if you experience severe discomfort, pain or any other worrying symptoms please stop the exercises and speak to your therapist.

# Who can I contact if I have any concerns or questions about desensitisation?

If you have concerns about any aspect of this technique please speak to the therapist in charge of your care.

Name of therapist:....

Contact telephone number: .....

Out of hours / emergency contact details:

### Contacts, useful numbers and links (to be supplied)

#### 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。

> Designed & Produced by the Department of Clinical Illustration, New Cross Hospital, Wolverhampton, WV10 0QP Tel: 01902 695377.