



Upper Limb Unit: Hand Therapy

Desensitisation

Introduction

Following injury or surgery to the hand, the nerve endings may become oversensitive. This means that normal touch is more intense and uncomfortable. The following techniques are designed to reduce the sensitivity of your affected area. This programme can also be used in the early stages of nerve recovery when hypersensitivity may be a problem.

The aim is to bombard the nerve endings with 'normal' sensation to teach the receptors how to produce a normal response to touch, texture, temperature and impact.

Only use the techniques that your therapist has indicated as some of the techniques may not be appropriate for you. It is important that the techniques are carried out on a regular daily basis to maintain progress.

Immersion Massage

This technique is a good starting point for treatment as it reduces the sensitivity before using the other methods described.

- Fill a container with a dry textured mixture for example lentils, rice and cereal.
- Place your hand in the container moving it around for approximately five minutes.

Change the texture regularly building up to a more uncomfortable one, for example rice and cereal.

Massage

Massage can be used to soften and reduce hardened scar tissue and minimise the sticking of scar tissue to the surrounding structures for example the tendons or skin. In this instance massage can also help make a scar less sensitive to touch.

- Start by applying some hand cream to the affected area.
- Starting at the edge of the affected area, begin massaging with the finger or thumb.
- Using light pressure, massage in a circular motion, concentrating on a less sensitive area first.
- Massage for a maximum of five to ten minutes until sensitivity has reduced, and then move to an adjacent area and repeat.
- Continue moving towards the most sensitive part until the whole area has been



Patient Information

covered.

Massage with textures

These can be used to help make an area less sensitive to uncomfortable materials that you come into contact with on a daily basis.

- Begin by **lightly** rubbing the sensitive area with a tolerable texture for example cotton wool. Continue until sensitivity reduces.
- Gradually increase to rougher materials or those that you find more uncomfortable.
- Gradually increase the amount of pressure that you can tolerate.

Vibration

Vibration not only assists with desensitisation but also relaxes the muscle that may have tightened due to pain or muscle tension.

- Use a mini-massager or the base of an electric razor or toothbrush.
- Use the massager in a circular motion over a less sensitive area moving towards a more sensitive area for approximately five minutes.

Please note: only use this technique if advised by your therapist as in some circumstances it may worsen your symptoms.

Tapping

Tapping is particularly useful in desensitising the tips of the fingers. Begin by **gently and slowly** tapping the affected part on a soft surface. As this becomes more comfortable progress to a harder surface and with more speed.

Further Information

If you need further information please contact your Therapy Department:

University Hospital, Coventry and Warwickshire: Tel 024 7696 6016

Rugby, St Cross Hospital: Tel 01788 663257 For further information please visit our hand service web site <http://tinyurl.com/uhcwhand>

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6016 and we will do our best to meet your needs.

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Department	Upper Limb Unit
Contact Tel No	26016
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