



# Scar desensitisation following joint replacement surgery

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Version 1



The purpose of this leaflet is to provide advice on how to make scar tissues less sensitive and feel more normal following joint replacement surgery.



Scar formation is normal following an injury or surgery. When this happens, the scar can become thickened, firm, raised and sometimes become 'over-sensitive' to temperature, touch and textures. It can also limit movement and function.

This is commonly referred to as hypersensitivity. The symptoms can be unpleasant and it may take some time for this sensitivity to reduce and the sensation to normalise.

It is important for scars and the surrounding skin to get used to being touched and used normally as soon as possible after surgery. This reduces the risk of developing hypersensitivity and speeds up recovery.

## General instructions

To reduce any present hypersensitivity, the nerve endings need to be "re-trained" to distinguish between different types of sensation.

This leaflet outlines a programme of how to "re-train" the nerve endings by exposure to a range of sensations.

Many of the activities can be carried out as part of your daily routine.

Where possible, do as instructed in a relaxed environment with no distractions and concentrate on the activity.

Compare the sensation you feel on a non-sensitive area to the sensitive area.

Try to do these exercises 3-4 times a day for a few minutes at a time.

It is normal for these activities to be uncomfortable and possibly even painful at first. Try to choose materials and activities that you are able to tolerate and progress this as you feel able. If you experience intolerable pain or discomfort, stop that activity and try one that is more manageable.

## Scar massage

Massaging the affected limb can be beneficial for both sensitivity as well as flattening and softening the scar. Massage can either be done by yourself or someone else.

Moisturisers or massage oils can be used, but make sure not to use anything that may irritate the skin. Non-perfumed moisturisers are best, such as E45 or Aqueous Cream.

To massage your scar, follow these steps:

- Wash the area with non-perfumed soap prior to massage and application of cream or oil.
- Use a small amount or moisturiser or oil and massage the area for approximately 5 minutes.
- Massage in small circular movements with your thumb and finger pressed down along the scar: this should be firm enough to make the tip of your nail white.
- **Do not** drag the skin. This can cause friction making the skin fragile and sore.
- Massage should be completed 3-4 time daily.

### **Textured massage**

This is a great way of re-educating the nerves around your scar. Collect a variety of clean materials with smooth, medium, rough and coarse graded textures. Examples are in the box below but feel free to use your own ideas and with what you have available to you.

Smooth	Medium	Rough	Course
Satin/Silk	Felt	Towelling	Velcro
Velvet	Cotton Material	Wool	Scourer
Soft Make-up or Paint	Cotton Wool	Netting/ Shower Buff	Bristle Brush/Tooth
Brush		Puff	Brush

- Rank your selected items in order of grade and most bearable, to unpleasant to intolerable.
- Starting with the most tolerable, first make small gentle circles over the scar until this feels comfortable and easy. Do this continuously for 2-3 minutes.
- Select the next most tolerable (higher grade) and repeat the massage; if this feels uncomfortable try to continue with the massage until it becomes more bearable.
- Should the sensation from the massage from the higher grade become intolerable return to the grade below and continue until comfortable again.
- Progress through each of the grades of fabric, using the above technique until the most unbearable becomes easy to tolerate.

## **Tapping and vibration**

- Gently tap the area around the scar. As the sensation becomes tolerable, tap directly over the scar. Continue for 5 minutes.
- Vibration can also be effective at desensitising skin. Using a device such as an electric toothbrush
  or shaver, switch on then using the 'base' of the device apply to the skin adjacent/next to the scar.
  As the sensation becomes tolerable place the base closer to the scar or over it. Continue for up to
  5 minutes.
- Should the sensation from tapping and vibration become intolerable return to an area around the scar that is comfortable and repeat the process.



### **Temperature**

- Bathing/showering: Select a water temperature as warm or cold as you can tolerate to begin. Increase or reduce the temperature as tolerated.
- Hot and cold packs can be useful for pain relief and to reduce sensitivity. Apply for up to 10
  minutes at a time. Ensure to test the area with normal skin sensation before applying to avoid
  injury or burns. Always use a barrier such as damp cloth between your skin and the hot/cold pack.

#### **Function**

- It is important to use your limb during your daily activities. This not only helps desensitise the scar, but increases your function helping you back to normality.
- Choose activities that may increase sensitivity like walking, swimming, cycling and gently increase the amount of time you are able to spend doing them.
- If at any stage the sensation becomes intolerable, stop and wait for the sensation to settle before continuing or trying again.



## **Further information**

If you have any questions or concern, please contact the Arthroplasty Helpline Monday to Friday 8am-4pm on 0141 951 5521.

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