



Hand desensitisation techniques for hypersensitivity

Following an injury or surgery, some people may find that their nerve endings have become oversensitive – causing discomfort and even pain. This leaflet gives advice on some techniques you can use to desensitise the affected area. Please ask your physiotherapist if you have any questions.

What is hypersensitivity?

This is when a normal touch to your skin or scars at the site of an injury or surgical wound become more intense, uncomfortable and painful.

The sensation can be described as a burning, stinging or shooting pain and can result in people not being able to tolerate any pressure in the area affected.

What are desensitisation techniques?

Desensitisation techniques can be used to reduce the hypersensitivity. The aim is to effectively re-educate your nervous system by stimulating the nerves to gradually get used to normal touch, temperature, texture and use again. If left untreated, the brain will continue to interpret touch as pain.

The following techniques have been shown to reduce the sensitivity of your affected area. It is important that the techniques are carried out on a regular daily basis to maintain progress – at least three to five times a day. Concentration is important to normalise the system. Concentrate on the how the sensation feels on the unaffected side first and then try on the affected side.

Technique 1: Touching the affected area with different textures

Stroking the affected area with different textures can help make an area less sensitive to uncomfortable materials that you come into contact with on a daily basis. **Aim to do this three to five times every day.**

- Begin by lightly rubbing the sensitive area with a soft texture, for example, cotton wool. Continue until the sensitivity reduces. You might want to start around the edge of the sensitive area and then work towards the most sensitive part.
- Gradually increase to rougher or more textured materials or those that you initially find more uncomfortable.
- Gradually increase the amount of pressure that you can tolerate.



Technique 2: Immersion massage

- Fill a container with a dry textured mixture, for example lentils.
- 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 or cereal.



Technique 3: Vibration

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

- **Please note:** only use this technique if advised by your therapist as in some circumstances it may worsen your symptoms.
- Use a mini-massager or the base of an electric razor or toothbrush.
- Use circular motion over a less sensitive area moving towards a more sensitive area for approximately five minutes.

Technique 4: Tapping / Percussion

Tapping is particularly useful if the tips of your fingers are hypersensitive.

- 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.
- You could also use a light object, such as a pencil. Lightly tap the area of your hand which is hypersensitive. Keep tapping continuously for two minutes or until you notice feeling in the area changing or it is starting to feel numb.

Technique 5: Hot and cold

After injury the nerve may not be able to feel hot and cold the same way. The nerve may require re-education to feel these temperatures normally.

- Try submerging your hands in first a bowl of warm water and then into a bowl of cold water. This stimulates the nerve to recover and get used to normal temperatures again.
- Hot and cold compresses can also be useful in helping with controlling pain.

Technique 6: Massage

If your injury or surgery has caused scar tissue then massage can help to reduce the sensitivity. Sometimes an area can become sensitive without scar tissue.

- Start by applying some hand cream or oil to the scar or 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.
- Continue moving towards the most sensitive part until the whole area has been covered.

Technique 7: Function

It is important to use your hand during daily activities. This will help stimulate the nerve recovery. Think about how the sensation feels when you are doing things with both hands. Comparing to the non-sensitive side can help the brain speed up recovery.

Monitoring your progress

It may take several sessions and a few weeks before you notice some improvement. These techniques can be uncomfortable at first, but this will improve if you do them often and regularly.

If you are finding the desensitisation programme difficult or feel your symptoms are not getting better or are getting worse, please contact your therapist.

Useful numbers and contacts

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Please ask if you need this information in another language or format.

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