

Coping with impaired sensation post-stroke



This brochure is aimed to educate you on how to cope with reduced arm/hand sensation post stroke.

Sensory loss after stroke

Sensory loss means reduced or loss of ability to feel certain sensations. This can affect daily life and safety.

Types of Sensory Loss:

Light Touch – Reduced feeling when something touches the skin (e.g., clothing, a hand).

Proprioception – Trouble sensing body position (e.g., not knowing where your feet are without looking).



Discrimination – Difficulty recognising objects by touch (e.g., identifying coins/keys in a pocket).



Temperature – Unable to tell hot from cold



Key Impacts

<u>Greater chance of injury</u> – Unable to sense hot/cold or pain, increasing burns, cuts, bumping into objects with the affected hand, dropping items accidentally





<u>Reduced coordination</u> – Trouble holding utensils, writing, or walking safely due to weak grip or not sensing body position.



Sensory Re-Education After Stroke

What is it?

Helps the brain "relearn" how to feel by retraining and stimulating the senses.

How does it work?

<u>Touch & Texture Practice</u> – Using different objects (soft, rough, warm, cold) to improve feeling.

<u>Hand & Body Awareness</u> – Exercises and habits forming to recognize where limbs are without looking

<u>Repetition & Focus</u> – Regularly practicing tasks like buttoning a shirt or holding a spoon to rebuild nerve connections.

How often should I be doing it?

Activities can be performed for 15-20 minutes each time, 3 times a week for at least 6 weeks

Stop if you experience any pain/discomfort.

Sensory Re-Education steps

A. Calibrate using unaffected hand and vision with familiar items

Close your eyes

- a. Hold onto object using unaffected hand
- b. Describe critical features of the object based on shape, size, texture and weight
- c. Pass object to affected hand
- d. Describe object again

Open eyes

- e. Compare and reflect any differences in both hands
- f. Repeat above steps until the affected hand is able to feel as close as possible to the unaffected hand



B. Progress with other day to day items

- a. Familiar objects: spoons, buttons, phone
- b. Size of items: Large coins → Smaller coins



- c. Variety of objects:
 - i. Shape: round, square, irregular shape (e.g., house keys)
 - ii. Texture: paper, wood, metal

C. Practice with day-to-day tasks

- a. Buttoning clothes
- b. Eating with fork and spoon
- c. Identifying correct coins with eyes closed
- d. Retrieving keys from a bag of items







Safety advice/Tips

- Use vision to observe the motion and location of affected arm/hand
- ✓ Use vision to avoid gripping an object more than necessary
- ✓ Use unaffected arm to check temperature of water before bathing
- ✓ Use unaffected arm to handle sharp objects or have others assist you
- ✓ Check skin of affected arm/hand daily for any swelling, redness, warmth or broken skin

If you are concerned with specific sensory difficulties, approach your Occupational Therapist to assess your difficulties, so that a specific exercise program can be recommended to suit your sensory issues.

Notes:

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