TOPIC:

The Hemiplegic Arm and Fand After Stroke



A stroke can cause weakness (hemiplegia) on the affected side.

This can impact the ability to:

- move the arm and hand
- carry out functional tasks
- protect the arm from injury

Careful handling and care of the arm and hand can reduce pain and prevent complications.



What you should know:

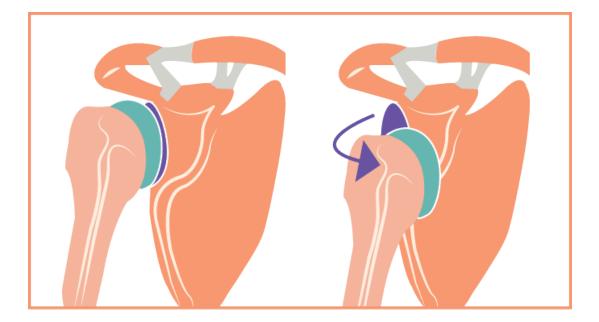
- The shoulder is made up of small muscles and ligaments which support the joint
- >50% persons with hemiplegia will experience pain in their affected arm and/or hand
- Swelling in the hand is likely to develop if not well supported



What you should know:

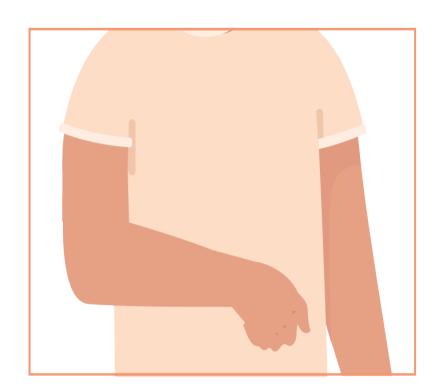
- Pain can interfere with mood, sleep, day to day activities, and overall quality of life
- Altered sensation can make a person with stroke unaware of the position of their arm and can increase risk of injury
- The affected arm and hand can have altered muscle tone (low or high)





- A low tone limb will feel limp and heavy.
- A low tone hemiplegic arm is at risk of overstretching or tearing weakened muscles.
 - This may cause a partial dislocation (subluxation) which is not correctable.





A high tone limb will feel stiff and tight. It can be very difficult to move the arm or hand, and to provide care.

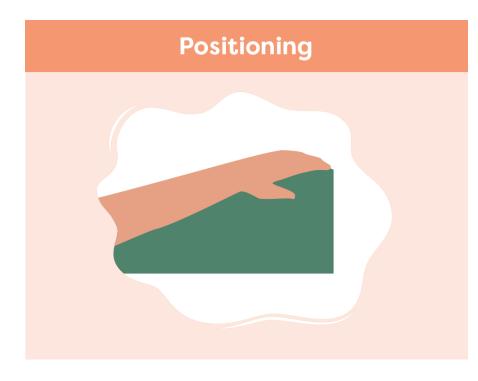
This can contribute to:

- Skin breakdown (underarm, hand)
- Difficulty in assisting with hygiene and dressing
- Limited range of motion (contractures)
- Shoulder pain

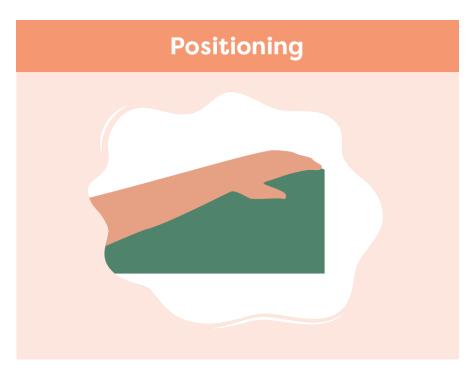
Move the limb carefully and slowly - do not force movement!



Smart Tips:



- Be gentle when moving the arm or hand. Avoid pulling on the limb
- Ensure the affected arm and hand are always supported. Try to:
 - ensure the elbow and forearm are placed away from the body
 - keep the wrist straight or slightly extended
 - place the hand palm down with fingers open as much as possible



Goal: 30 degrees of wrist extension, 30 degrees of flexion through digits

Smart Tips for Stroke Care

- Consider use of splints/ rolls
- Careful positioning can help with reducing the high tone (spasticity), and maintain joint ROM





- Never pull on the person's affected arm or lift from the underarm
- Encourage participation
- When using a lifting device, ensure the affected arm is positioned inside the lift sling and in front of the body
- Support the arm when the person is standing, transferring or ambulating
- Use a sling if recommended by a therapist

Activities of Daily Living (ADL's)



- Always support the hemiplegic arm
- Move the arm and hand slowly and gently

Smart Tips for Stroke Care

- Monitor clenched hand for hygiene and skin health
- Do not raise the arm above shoulder level unless the person can do so themselves
- Dressing rule for stroke: hemiplegic arm should be "first on; last off"



Seek extra support

- All team members have a role to play in caring for the affected arm and hand
- Occupational Therapists and Physiotherapists are skilled in hemiplegia

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