6.2a Shoulder Care

There are many considerations that are crucial to promoting safety and optimizing recovery when working with people who have had a stroke. The TACLS Quick Reference Guides were developed from the TACLS resource and can be used as quick reference to help *support healthcare providers* and informal caregivers who may not typically work with and care for people who have had a stroke.

We recommend reviewing the full **TACLS resource** for more complete information: **strokebestpractices.ca/resources/professional-resources/tacls**

Quick reference guide highlights

- Always follow the current care plan for the person that you are working with.
- As many as 72% of people with stroke will experience shoulder pain this can result in depression, sleeplessness and reduced quality of life.
- Typically, during the early stages of stroke recovery, the arm is in a flaccid stage of recovery (low tone); a high tone arm (spasticity) often occurs in later stages of recovery, although may start to present before hospital discharge.
- It is critical to know the correct techniques and strategies to handle the upper extremity affected by stroke to help prevent damage, pain and loss of function, particularly around the shoulder. Consult with an occupational therapist (OT) and physiotherapist (PT) for correct positioning strategies.
- **NEVER** perform exercises on an affected shoulder unless recommended by an OT or PT and they have demonstrated correct technique for you.

Low tone (flaccidity) in early stages of recovery

- A flaccid or low-tone arm feels heavy and limp.
- A shoulder that is affected by stroke can be injured more easily than the unaffected shoulder. Because of the multiple bones and muscle attachments as well as the influence of gravity, it is not as stable as other joints in the body. This makes it more at risk for complications such as subluxation due to muscle weakness or pain due to impingement.
- Muscles affected by stroke may no longer hold the shoulder complex in proper alignment. When poor alignment occurs, movement is affected, and pain can occur.





How you can help

- Mishandling the affected low tone arm can result in further arm and shoulder damage, pain and loss of function this can be prevented with proper care.
- Joint protection strategies should be used during the early or flaccid stage of recovery to prevent or minimize arm and shoulder pain and injury.
- NEVER pull on the affected arm.
- The affected shoulder should not be moved passively beyond 90 degrees.
- Consult with OT and PT for strategies to position and support the affected arm.
- Position and support the low tone arm during rest, while in a chair or in bed. For example, by using pillows in bed and pillows plus an adjustable table/arm board while sitting in a chair. If using a table, consult with OT to ensure that it is at an appropriate height.
- Protect and support the arm during wheelchair use, for example using a hemi-tray, arm trough or pillow (consult OT to set up appropriate support).
- Protect and support the affected arm when standing, walking, during transfers and during all personal care (e.g., dressing, bathing, repositioning).
- Use of a sling is discouraged except during the flaccid arm stage.
- **ONLY use a sling** if recommended by an OT or PT; follow the current care plan.
- Remove sling when the individual is resting in bed or chair. Ensure the affected arm is supported appropriately.
- Follow site protocols and/or bed & chair positioning posters if available. Resources available on **www.strokebestpractices.ca**.

High tone (spasticity) in later stages of recovery

- A high tone or arm with spasticity feels stiff and difficult to move through normal range.
- Increased tone usually occurs in the flexor muscles and can result in the arm being pulled into the chest and the fingers closing into a fist.
- Spasticity can be painful and interfere with functional recovery. If not managed properly, contractures, skin breakdown and decreased quality of life can occur.



How you can help

- Support the arm as recommended by OT and PT; use all recommended equipment and positioning strategies.
- Spasticity may make it challenging to provide care. Moving the arm for washing and dressing may be difficult and may be painful for the person who has had a stroke. An OT can provide strategies to support the person with these activities of daily living.



- Never force movement in an arm/ hand with spasticity. Gentle, slow movement is important.
- PT and OT will recommend appropriate range of motion exercises, stretches, support, positioning and pain management methods to manage an upper extremity with high tone. Follow the plan closely and ask for the PT or OT to demonstrate if helpful to you.

Note: This information represents only some of the priorities of care related to shoulder care; consult the OT and PT for any questions or concerns regarding care of the upper extremity post stroke.

References:

- 1. Canadian Stroke Best Practice Recommendations: www.strokebestpractices.ca, Rehabilitation and Recovery following Stroke, 6th Edition, Sections 5.2 and 5.3
- 2. Taking Action for Optimal Community and Long-Term Stroke Care (TACLS) Shoulder Care
- 3. For example of positioning strategies see pages 33 and 34: Semenko, B., Thalman, L., Ewert, E., Delorme, R., Hui, S., Flett, H. and Lavoie, N. (2017). An Evidence Based Occupational Therapy Toolkit for Assessment and Treatment of the Upper Extremity Post Stroke. [PDF] Available at: https://professionals.wrha.mb.ca/old/ professionals/occupational-therapy/files/UpperExtremityToolkit2017.pdf.

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