# Quick Reference Guide on Nursing Care Post Stroke: A Resource for Use During COVID-19 Pandemic

- *This document is meant to support staff who may not have experience working with the acute stroke population and provides a summary of the typical process and resources required to support patients admitted to hospital following stroke.*
- The linked information, materials and other content in this document is not intended to replace a health professional's own professional judgement and decision-making.
- This documents contains links to information and materials and other content that might assist health professional's work and consult remotely with people with stroke, and with people with stroke who may have been discharged prior to completing their full rehabilitation programs.
- Please note these are suggestions ONLY and have not been reviewed or endorsed, and some may include a cost.

**BACKGROUND:**

To protect staff and facilitate infectious disease practices many hospitals have made the decision to admit all COVID-19 positive patients to specialized COVID-19 units. Many of the staff on these units will not have training in providing stroke care. Stroke guidance documents have been developed to support staff unfamiliar with managing acute ischemic and hemorrhagic stroke patients. This information is intended to be "guidance rather than directive" and is not meant to replace clinical judgment.

**When possible:**

- Assign nurses with stroke expertise to the inpatient area where stroke patients are being admitted
- Consult with a practitioner with stroke expertise for ongoing support

**Prior to seeing the patient:**

- **Locate stroke order set:**
  - Note that there are different order sets for ischemic and hemorrhagic stroke as well as orders set for those who received tPA and/or EVT
  - Where can you obtain the orderset?
- If available at your organization, obtain stroke care pathway
- What is tPA:
  - TPA is a thrombolytic or a "Clot Buster" drug. This clot buster is used to break-up the clot that is causing a blockage or disruption in the flow of blood to the brain and helps restore the blood flow to the area of the brain. It is given by intravenous (IV), not by mouth.
- What is Endovascular Thrombectomy (EVT):
  - EVT is a highly specialized procedure involving the mechanical removal of a clot in the brain. For more information watch this short video

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**Neurological Assessments and Observations:**

A neurological (neuro) assessment provides a standardized method to rapidly identify emerging stroke complications, and will provide a better patient prognosis. Symptoms of change in neurological status may include:

- Restlessness
- Combativeness
- Confusion
- Severe headache
- Lethargy
- Decline in motor strength
- Decrease in coordination
- Change in vision
- Change in balance
- Change in speech/language
- Pupil changes

***(HSFO, Faaast FAQS, 2007)***

**Glasgow Coma Scale:**

- The Glasgow Coma Scale (GCS) is a neurological scale which aims to give a reliable and objective way of recording the state of a person's consciousness. The GCS should be completed if you are unable to complete an acute neurological scale, such as the NIH Stroke Scale (NIHSS), due to a decreased level of consciousness.
  - Directions on how to complete the GCS can be found here

**NIH Stroke Scale (NIHSS):**

- The NIHSS is a 15-item impairment scale intended to evaluate neurologic outcome and degree of recovery for patients with stroke. The scale assesses level of consciousness, extraocular movements, visual fields, facial muscle function, extremity strength, sensory function, coordination (ataxia), language (aphasia), speech (dysarthria), and hemi-inattention (neglect). It is important to note that one must be both trained and certified in order to administer the NIHSS.
  - Information on training program and certification can be found here

**Complete a swallowing screen:** STAND Tool or the validated tool used in your organization

*Only complete the screen if you have been trained! If not trained, contact a Speech and Language Pathologist (SLP).*

- The swallowing screen should be completed prior to any oral medications, nutrition or hydration is administered.
- Patients should remain NPO until screen is completed and passed.

**Patient and Family Education:**

- Ensure that you are keeping patients, family member/caregivers informed of all aspects of care and are providing any necessary education. Document any education provided in the patient chart, be sure to share this with other team members such as at daily huddles/rounds.
- A good resource to support patient/family education provided by the Heart and Stroke can be found here.
  - Name of resource “Your Stroke Journey: A Guide for People Living with Stroke”.

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**Discharge Planning:**

*Discharge planning should include the interprofessional team and the patient and caregiver/family.*

- If the discharge plan is for inpatient rehabilitation, organizations procedures should be consulted to facilitate the process.
- If the discharge plan is for discharge home with/without follow-up with community stroke rehabilitation (outpatient, home-based, hybrid) programming organizational procedures should be consulted to facilitate the process.

**Inpatient Stroke Unit Care OR Routine Assessments:**

*(Adapted from many other regions around the province including South Western Ontario Stroke Networks acute stroke orientation modules found here)*

| Topic/Assessment | Key Messages |
|---|---|
| Body Temperature | • Monitor body temperature regularly<br>• If elevated > 37.50 Celsius, use treatments to reduce fever, consider underlying infection |
| Blood Pressure | • Monitor blood pressure and be aware of the different parameters depending on type of stroke<br>• Administer anti-hypertensives according to BP target |
| Heart & Resp Rate<br>Oxygen Saturation | • Follow parameters as set by physician<br>• Report any new atrial Fibrillation to physician |
| Blood Glucose | • Monitor blood glucose levels as ordered<br>• HbA1c and fasting glucose on admission |
| Pupils | • Subtle neurological changes, such as changes in pupil shape, reactivity & size may indicate rising intracranial pressure<br>• Record the size of the pupils in mm using a pupil scale prior to the application of the light stimulus. Indicate the reaction of pupils as either:<br>**+** = Brisk Reaction **S** = Sluggish **–** = No Reaction<br>***It is critical to report a change in either pupil size, shape or reactivity** |
| Neuro Assessment | • Complete GCS and Neuro assessment as per physicians order |
| Swallowing Screen:<br>***STAND TOOL*** | • All stroke patients are NPO until Swallowing Screen completed<br>• Swallow Screen done within 24 hours of admission<br>• Monitor for signs and symptoms of aspiration such as coughing, choking, wet/gurgly voice/ breath sounds or breathlessness during or immediately following meal – if present, place NPO and inform/consult SLP |
| Nutrition and hydration | • Monitor and document oral intake at each meal<br>• Consult Dietetics if consumes less than 50% of meals over 3 days<br>• If enteral feeding, follow recommendations from Dietetics |
| Oral Care | Poor oral care results in bacterial colonization in the mouth and higher risk of aspiration pneumonia<br>➢ Provide oral care after meals and at HS, even if patient is NPO<br>➢ Use a toothbrush and toothpaste<br>➢ Brush teeth/dentures and tongue |

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| Topic/Assessment | Key Messages |
|---|---|
| Transfers and positioning | • Mobilize early if safe to do so (consider medical stability, ability to follow instructions, insight, impulsivity, strength)<br>• Positioning: Support the hemiplegic side<br>  ○ For more information please visit the West GTA Stroke Network website; specifically the virtual classroom where you will find an e-learning module entitled “Management of the Upper Extremity Following Stroke”.<br>• Do not pull on the hemiplegic arm<br>• Consult OT/PT for further tips on transfers, positioning and mobility |
| Bowel and bladder | • Constipation an incontinence are common after stroke, especially if the patient is not able to mobilize independently. Enteral feeding may cause constipation or diarrhea<br>• Use of indwelling catheters should be avoided unless clinical indication<br>• Implement a toileting routine and transfer to toilet or commode, if safe to do so |
| Communication | • Aphasia (disorder that affects your ability to speak, read, write and understand)<br>  ○ Receptive (saying words that don’t make sense)<br>  ○ Expressive (difficulty forming and understanding complete sentences)<br>  ○ Global (difficulty forming and understanding words and sentences)<br>• Apraxia (difficulty initiating and executing voluntary movement patterns necessary to produce speech)<br>• Dysarthria (speech disorder that is characterized by poor articulation, respiration, and/or phonation. This includes slurred, slow, effortful, and rhythmically abnormal speech).<br>• Consult SLP for strategies on how to communicate with a patient with communication difficulties |
| Pain | • Pain assessments should be performed regularly using an aphasia friendly pain scale<br>• Patient repositioning is important for pain management<br>• Consult PT/OT for pain relieving strategies |
| Skin breakdown and wound care | • Complete Braden Skin Assessment<br>• Mobilize early, frequent position changes<br>• If immobile, consider pressure relief mattress<br>• Promote early optimal nutrition |
| Falls | • Ensure appropriate falls prevention strategies in place |
| Vision and Perception | • Patient may present with inattention to one side of their body or space<br>• Patient may present with visual field deficits to one side<br>• Ensure call bell and room set-up is on the unaffected side<br>• Ensure you approach and speak to the patient on the unaffected side |
| Completion of AlphaFIM® Instrument (AlphaFIM®) on or by day 3 | • If credentialed, complete Alpha-FIM® on or by day 3<br>• If not credentialed, connect with a credentialed co-worker to assist in completing the Alpha-FIM®<br>• If unable to locate a credentialed clinician in your organization consult with Stacey Williams (Stacey.Williams@thp.ca) for information on the credentialing process. |

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**Additional COVID-19 related resources:**

- Please visit the West GTA Stroke Network website at www.westgtasroke.ca for more resources related to COVID-19 Specific information.