Nursing Stroke Quick Reference Guide and Assessment Checklist – COVID-19 Pandemic

This document is meant to support nurses who may not have experience working with the acute stroke population and provides a summary of guidelines required to support patients admitted to hospital following stroke.

For basic information on stroke, refer to the Stroke 101 document

Prior to seeing the patient:

- Locate 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
- If available at your organization, obtain stroke care pathway

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 balance
- Change in speech/language
- Pupil changes

(HSFO, Faaast FAQS, 2007)

***Contact the physician or nurse practitioner if any change in neurological status is noted.**

❑ **Complete the Canadian Neurological Scale (CNS)**

The CNS is an assessment tool for evaluating and monitoring the neurological status of acute stroke patients. It can be administered in approximately 5 minutes.

Directions on how to complete the CNS can be found here

❑ **Complete the 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 a CNS with a patient due to a decreased level of consciousness.

Directions on how to complete the GCS can be found here

❑ **Complete a swallowing screen** (e.g. ToRBSST)

- Conduct the swallowing screen (e.g. ToRBSST) **ONLY IF TRAINED**; If not trained, contact a Speech Language Pathologist (S-LP).
- The swallowing screen should take place before any oral medication, nutrition or hydration is administered.
- Patients will remain NPO until screen is completed and passed.

❑ Ensure that you are keeping patients, family members/caregivers (as appropriate) apprised of all aspects of care and are providing any necessary education.

Created: April 7, 2020

For a list of severe complications and other complications after stroke, click here

Routine Assessments (Adapted from: http://www.swostroke.ca/acute-stroke-unit-orientation/)

Routine Assessments	Nursing Monitoring and Treatment
Safety checklist	• Complete safety checklist at each encounter
Body temperature	• Monitor body temperature regularly • If elevated > 37.5 Celsius, use treatments to reduce fever, consider underlying infection
Heart rate	• Follow parameters as set by physician/NP
Respiration rate	• Follow parameters as set by physician/NP
Oxygen saturation	• Oxygen saturation should be monitored with the use of pulse oximetry • Follow parameters as set by physician/NP
Blood pressure	• Monitor blood pressure and be aware of the acceptable blood pressure parameters for individual patients
Blood glucose	• Monitor blood glucose levels
Pupils	• Subtle neurological changes, such as changes in pupil shape, reactivity & size may indicate rising intracranial pressure • Record the size of the pupils in mm using the pupil scale prior to the application of the light stimulus. Indicate the reaction of pupils as either: **+** = Brisk Reaction **S** = Sluggish **–** = No Reaction If the eyes are closed due to swelling, record "**C**" ***it is critical to report a change in either pupil size, shape or reactivity**
Hemiplegic shoulder	• Subluxation of hemiplegic shoulder may result in a pain syndrome and/or soft tissue damage • Ensure proper positioning of hemiplegic arm to maintain neutral position (e.g., use pillows in bed, a lap tray in chair, and a sling with standing)
Positioning and transfers	• Mobilize early if safe to do so (consider medical stability, ability to follow instructions, strength, etc.) • Positioning: Support the hemiplegic side (e.g. pillow under affected arm when sitting upright) • DO NOT pull on the hemiplegic arm • Consult Occupational Therapist (OT) and Physiotherapist (PT) for further tips on transfers, positioning and mobility
Skin breakdown and wound care	• Complete Braden Skin Assessment • Mobilize early, frequent position changes • If immobile consider pressure relief mattress, promote early and appropriate nutrition
Pain	• Pain assessments should be performed regularly using an aphasia friendly pain scale (see "Communication" below for aphasia definition) • Patient repositioning is important for pain

Routine Assessments	Nursing Monitoring and Treatment
Bowel and bladder	• Constipation and incontinence are common after stroke, especially if the patient is not able to mobilize independently. Enteral feeding may cause constipation or diarrhea • Use of indwelling catheters should be avoided (unless required for close fluid balance monitoring) • Implement toileting routine
Nutrition/Hydration	• Patients with dysphagia, eating a modified diet or receiving enteral feeding are at risk of aspiration pneumonia • If symptoms of aspiration present (e.g., coughing after eating/drinking, etc.), keep patient NPO, use IV hydration, and find alternate routes for medications • Some patients may be silent aspirators and have no overt signs • Consult with S-LP for tips on diet texture and feeding strategies • Consult with Registered Dietitian (RD) for nutritional intake
Oral care	• Poor oral care results in bacterial colonization in the mouth and higher risk of aspiration pneumonia • Ensure an oral care routine, even if patient is NPO • Complete Oral Health Assessment Tool (OHAT)
Cognition	• Screen for delirium using a tool such as the Confusion Assessment Method • Assess orientation (person, place, time) • Consult OT for more detailed cognitive assessment
Falls	• Ensure appropriate falls prevention strategies in place (i.e. use of bed rails, bed in lowest position, call bell in reach) – Refer to safety checklist
Communication	Are any of the following conditions present? ▪ Aphasia (disorder that affects your ability to speak, read, write and listen) - Receptive (saying words that don't make sense) - Expressive (difficulty forming and understanding complete sentences) - Global (difficulty forming and understanding words and sentences) ▪ Apraxia (difficulty initiating and executing voluntary movement patterns necessary to produce speech) ▪ Dysarthria (speech disorder that is characterized by poor articulation, respiration, and/or phonation. This includes slurred, slow, effortful, and rhythmically abnormal speech) Consult S-LP for strategies on how to communicate with a patient with communication difficulties
Perception	• Patient may present with inattention to one side of their body or space • Ensure call bell and room set-up is on the unaffected side • Ensure you approach and speak to the patient on the unaffected side
Sleep Apnea	• Nurse should monitor patients for potential signs and risk factors for sleep

Routine Assessments	Nursing Monitoring and Treatment
	apnea, including: - Snoring, tiredness, pauses in breathing when sleeping, hypertension, large neck circumference • If you observe any of the above, speak to the physician

Discharge Planning

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

- If the discharge plan is for inpatient rehabilitation, complete the E-Stroke Rehab Referral application as soon as patient is deemed rehab ready.

If you have access to the online E-Stroke referral system:

- Complete Sections 5a/5b: Health Assessment/Safety and Special Needs
- If you are registered on E-Stroke, click here for instructions on how to input the information into E-Stroke

If you DO NOT have access to the online E-Stroke referral system:

- Ask a member of the interprofessional team with access to print a copy of the form and to assist with inputting the information in the electronic system.
    - Sections 5a/5b: Health Assessment/Safety and Special Needs