northern health
the northern way of caring

Regional Order Set

Ischemic Stroke: Greater than 24 Hours Post Thrombolysis Order Set

PATIENT LABEL

Allergies: ☐ None known ☐ Unable to obtain
List with reactions: _____

Weight: _____ **kg**

Code status: Refer to **10-111-5171 Medical Order for Scope of Treatment (MOST)**
(Note - This is not an order. Prescriber must obtain, complete and sign this order separately)

Swallowing precautions/diet

- NPO until completion of **10-000-5189 Adult Swallowing Screen (SST)** passed
- Once Adult Swallowing Screen (SST) passed, progress to: ☐ DAT ☐ Other: _____
- MRP to reassess in 24 hours
- If Adult Swallowing Screen (SST) failed or immediate allied health/nursing concerns, consult/referral to SLP/swallowing specialist for detailed assessment, diet recommendations and therapy plan and consideration for NG in the first three days of admission (Canadian Best Practices for Stroke Care 2018).

Vitals/Monitoring

- Neurovitals with SpO_2 qid x 24 hours, then MRP to reassess
- **10-000-5049-001 Adult NIH Stroke Scale** q12h shift
- Telemetry/Cardiac monitoring for 24 hours minimum; then MRP to reassess if further monitoring indicated
- Monitor intake, output and fluid balance x 24h and the MRP to reassess
- Maintain SpO2 between 90% to 94% unless contraindicated by COPD

☐ COPD patients maintain SpO2 between 88% to 92% unless otherwise specified

Daily investigations

- CBC times 3 days, then MRP to reassess
- 12 lead ECG times 3 days, then MRP to reassess
- Other: _____

Additional investigations

For temperatures greater than 38.5°C order:

- Blood culture
- Urine for C&S
- Chest x-ray

Medical imaging

- Confirm that 24 hour CT and carotid imaging has been performed

Note:

- *If 24 hour CT shows blood, hold anticoagulation and antiplatelet therapies until consult with neurology/internal medicine*
- *Urgent consult to vascular surgeon for consideration of carotid endarterectomy (revascularization) if carotid imaging reveals ipsilateral stenosis of 50% to 99% in a patient with TIA or non disabling stoke to occur as soon as possible once the patient is stable but within 14 days (Canadian Stroke Best Practices 2018).*

- Chest x-ray within 24 hours of admission (if not done in ER)

☐ Arrange holter monitoring Booked: _____

☐ Echocardiogram

Antiplatelet therapy: Select one of the following options if anticoagulation not indicated

☐ **ASA** 160 mg PO x 1 then **ASA** 81 mg PO daily

or

☐ **If NPO, ASA** 325 mg PR daily

☐ **clopidogrel** 300 mg PO/NG x 1, then **clopidogrel** 75 mg PO/NG daily

Physician signature: _____ **College ID:** _____ **Date:** _____ **Time:** _____

PATIENT LABEL

Anticoagulation therapy (when indicated and not until 24 hour post thrombolysis CT head competed)

Note: Antiplatelet therapy in addition to anticoagulation therapy is not indicated solely for stroke prevention however in patients with unstable coronary artery disease, dual therapy may be indicated, please assess on individual basis.

☐ **warfarin** _____ mg PO daily x 2 days, then daily **warfarin** orders based on INR target: _____

INR target 2.0 to 3.0 (unless otherwise indicated)

☐ Other: _____

(Please refer to formulary restrictions prior to starting **apixaban, rivaroxaban, or dabigatran**)

☐ Consult pharmacist for patient anticoagulation education (new anticoagulation start)

Lipid lowering therapy: ☐ **atorvastatin** 80 mg PO at bedtime ☐ Other: _____ (do not substitute)

Blood pressure management (choose one):

(Note: Caution is advised in patient with critical intracranial or extra cranial arterial stenosis who may require relatively higher blood pressure to maintain cerebral perfusions)

☐ **Patients with either persistent neurological deficits or critical arterial stenosis**

- **Initial management: Option A** x 24 hours (To complete 48 hours post event)
- After 24 hours start Option B

☐ **Patients without persisting neurological deficits (i.e. TIA) and without critical arterial stenosis**

- **Initial management: Option B**

Option A	Do not intervene for SBP less than 220 mm/Hg and DPB less than 120 mm/Hg
	If SBP greater than 220 mm/Hg or DBP greater than 120 mm/HG initiate the following:
	• Give **captopril** 6.25 mg sublingually x 1 dose STAT and repeat blood pressure reading in 20 minutes
	• If systolic BP 220 mm/Hg or diastolic BP greater than 120 m/Hg on two readings 20 minutes apart
	  • Notify MRP
	  • Repeat **captopril** 6.25 mg q20min PRN sublingual STAT (Maximum 25 mg in 8h period)
	  • After each dose, check blood pressure in 20 minutes, in 1h and q2h for 8 hours and until stable
	☐ If **captopril** contraindicated, give **cloNIDine** 0.1 mg PO q1h PRN for SBP greater than 220 mm/Hg or DBP greater than 120 mm/Hg (Maximum 0.7 mg in 24h period)

Option B	For BP greater than 140/90 mmHg initiate treatment (goal reduction of 15% per day with no greater than 25% decrease) ☐ **ramipril** _____ mg PO daily ☐ Other: _____

☐ **IV fluids**: _____

- Avoid IV glucose

☐ If NPO, NS IV at 75 mL/h and reassess in AM

Glucose management:

- For known diabetics hold oral hypoglycemic medications and consider basal bolus **insulin** therapy or local **insulin** order set
- Blood glucose target 6 to 10 mmol/L
- Check blood glucose qid for 24 hours and then repeat as needed

Patients with elevated blood glucose:

- If bedside glucose monitor is greater that 8 mmol/L notify MRP to consider basal bolus **insulin** therapy or local **insulin** order set

Physician signature: _____ **College ID:** _____ **Date:** _____ **Time:** _____

VTE prophylaxis (following repeat CT scan)

- Required for all patients unable to ambulate
- Mechanical prophylaxis with sequential compression device (SCD) and until hemorrhage has been ruled out on repeat CT 24 hours post thrombolysis
- Refer to **10-111-5162 Adult Venous Thromboembolism Risk Assessment and Prophylaxis in Acute Care**
  (Note - This is not an order. Prescriber must obtain, complete and sign this order separately)

Seizure management

- **Monitor for seizures. If patient seizures, initiate seizure precaution and notify MRP.**
- **LORazepam** 1 mg IV STAT PRN for seizure activity
  - May repeat q2min PRN up to maximum of 4 mg if seizure persists

  *For recurrent or persistent seizures greater than 15 minutes, consider **phenytoin***
  *(loading dose: **phenytoin** 17.5 mg/kg IV x 1, maintenance: dose **phenytoin** 100 mg IV q8h)*

Nausea

☐ **ondansetron** 4 mg IV q8h PRN

☐ **dimenhyDRINATE** 12.5 to 25 mg PO/IV q4h PRN

Smoking cessation

☐ **10-111-5117 Nicotine Withdrawal Protocol** (Note - This is not an order. Prescriber must obtain, complete and sign this order separately)

- Give patient smoking cessation literature, website quitnow.ca and BC Healthline information if patient agrees

Fever management

- Treat temperature greater than 37.5°C aggressively

☐ **acetaminophen** 650 mg PO/PR q4h PRN for temperatures greater than 37.5°C
(max **acetaminophen** from all sources 4000 mg/24 hours)

Bowel management

☐ Refer to **10-111-5201-001 Adult Bowel Care Orders - Patient Not Taking Scheduled Opioid**

☐ Refer to **10-111-5201-002 Adult Bowel Care Orders - Patient Taking Scheduled Opioid**

☐ Other: _____

Bladder management

- Avoid indwelling catheter

☐ Monitor patient for urinary incontinence or retention
  - If patient does not void spontaneously within 6h of admission, perform bladder scan
  - If bladder scan volume greater than 300 mL, then catheterize in and out
  - Repeat bladder scan q4 to 6h

☐ Implement bladder training program for patients with urinary incontinence or retention

Activity and care

☐ Head of the bed elevated 15° to 30° for patients at risk for airway obstruction or aspiration and those with suspected elevated intracranial pressure (AHA/ASA Guideline 2013)

☐ Supine position for non-hypoxic patients able to tolerate lying flat (AHA/ASA Guideline 2013)

- Reposition patient q2h and PRN
- Maintain head and body midline alignment, use supportive positioning for affected limbs
- Mobilize as tolerated and/or per OT/PT recommendations
- Skin care assessment using Braden scale qshift
- Mouth care qshift and PRN

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PATIENT LABEL

Referral (if not already sent)

☐ Physiotherapist ☐ Occupational therapist ☐ Dietician ☐ Speech Language Pathologist
☐ Pharmacist ☐ Social Worker ☐ Palliative care team
• Old chart to ward

Functional assessments

• Assess patient for falls risk and reassess when changes in status occur
• Consult Rehab Team OT/PT for rehabilitation assessment within 48 hours of patient admission
• Recommended usage to AlphaFIM® for prognostication at 3 days following stroke
(Refer to **10-000-5178 AlphaFIM Data Collection Form**)
• Complete an ADL assessment

Cognitive assessments

• Assess patient for cognitive status using a validated tool (e.g., MoCA)
• Assess patient for signs of depression, mood changes or changes in personality, notify MRP

Patient and family education

• Assess patient and family for learning needs and readiness for information
• All team members to provide education to patient, family, and caregivers throughout admission. Suggest begin stroke education with brochure “Your Stroke Journey: A guide for people living with stroke" (available at the Heart and Stroke foundation website: http://www.heartandstroke.ca/)
• Provide discharge education and skills training to patient, family and caregivers

Discharge plan

• Family meeting within 7 days of admission; Booked: _____
☐ Initiate discharge planning process
☐ Expected discharge to: ☐ Home or place of residence ☐ Repatriate/transfer to other acute care: _____
☐ Inpatient rehabilitation ☐ Long term care ☐ Palliative care
☐ Other: _____
☐ Expected discharge referrals: ☐ Home care services ☐ Outpatient rehabilitation ☐ Community based rehabilitation
☐ Palliative care team/advanced care planning/end-of-life specialist

Physician signature: _____ **College ID:** _____ **Date:** _____ **Time:** _____