NORTH Dakota | Health & Human Services
Be Legendary.

American Heart Association. Mission:Lifeline® Stroke

ND Acute Stroke Treatment Guideline

0-15 minutes

Patient Name: _____

Date of Birth: _____

ED Arrival: Date_____Time _____

Last Known Well: Date _____Time _____

- ☐ Activate Stroke Response Team
- ☐ Prepare for Stat CT
- ☐ Consider activating transport

Assess the following:

- ☐ BP _____mm/hg
- ☐ Pulse _____ bpm
- ☐ O2 Saturation _____%
- ☐ Bedside Glucose _____mg/dL
  (Do not repeat if completed by EMS. Treat if <60)
- ☐ VS q 15 min with neuro checks
- ☐ Continuous cardiac monitoring
- ☐ NIHSS on arrival _____

- ☐ O2 to keep SATS >94%
  (do not administer O2 if patient non-hypoxic)
- ☐ Keep NPO
  (including meds and ice chips)
- ☐ Establish 1-2 large bore IVs
- ☐ Normal Saline 0.9% TKO
- ☐ Consider activating telehealth

Do not delay CT scan for any of the preceding

15-45 minutes

- ☐ CT Scan head w/o contrast
  (Door to CT scan goal <25 minutes)
- ☐ Request stat read of CT scan
- ☐ Stroke Panel: CBC, Platelets, PT-INR, PTT, BMP, Troponin
- ☐ Serum pregnancy test for females of childbearing age
- ☐ 12L ECG if time allows
- ☐ Weight _____kg

CT Scan Results:
(Door to CT scan results goal <45 minutes)

- ☐ No acute findings
- ☐ New Ischemic Stroke
- ☐ Hemorrhage
- ☐ Other _____

- ☐ Consult with accepting neurologist once CT scan results obtained. Send images if able.
- ☐ Arrange transport plans if not already done

- ☐ If CT is negative for hemorrhage or other acute findings, complete Inclusion and Exclusion Criteria for IV Thrombolytic Treatment of Ischemic Stroke checklist to determine IV thrombolytic eligibility
- ☐ If patient is ruled ineligible for IV thrombolytic due to BP >185/110, refer to BP Management section

45-60 minutes

Choose one of the following:

IV Thrombolytic Eligible Ischemic Stroke Patient- Alteplase Administration

- ☐ IV Alteplase 0.9 mg/kg (max dose 90 mg)
  Total IV Alteplase. Total Dose _____mg
- ☐ 10% total IV Alteplase dose as bolus over one minute.
  Bolus Dose _____mg Time of bolus _____
- ☐ Remainder of IV Alteplase over 60 minutes
  Rate of infusion _____ml/hr
- ☐ Follow IV Alteplase with 50 ml Normal Saline 0.9% at same rate as IV Alteplase infusion

OR

IV Thrombolytic Eligible Ischemic Stroke Patient- Tenecteplase Administration

- ☐ IV Tenecteplase 0.25 mg/kg (max dose 25 mg) Total IV Tenecteplase. Total Dose ____mg
- ☐ IV Tenecteplase bolus over 5 seconds
- ☐ Flush IV line with 3-10 ml Normal Saline 0.9% before and after Tenecteplase bolus (not compatible with dextrose)

IV Thrombolytic Eligible Ischemic Stroke Patient

- ☐ VS and neuro checks q 15 min during infusion, then q 15 min x 2 hr, q 30 min x 6 hr, then hourly until 24 hours after treatment
- ☐ If BP > 180/105, refer to BP Management section below
- ☐ Repeat head CT if neuro status declines
- ☐ If symptom onset <24 hours, screen for large vessel occlusion (see below)
- ☐ No anticoagulant/antiplatelet for 24 hours
- ☐ NIHSS post infusion_____

Non-IV Thrombolytic Eligible Ischemic Stroke Patient

- ☐ ASA 300 mg PR
- ☐ If BP >220/120, consult with accepting neurologist regarding possible BP management
- ☐ If symptom onset <24 hours, screen for one or more of the following criteria indicating a possible large vessel occlusion (LVO):
  - ☐ NIHSS >6 score _____
  - ☐ FAST ED >4 score _____
  - ☐ Signs of cortical stroke: confusion, aphasia, neglect, visual field changes, head or gaze deviation
- ☐ If symptom onset is >24 hours consult neurologist regarding possible treatment options

Hemorrhagic Stroke Patient

- ☐ If SBP between 150-220 administer medications as listed in BP management section below to achieve BP <140/90.
- ☐ If SBP >220 mmHg, consult neurologist regarding BP management.
- ☐ If patient is on oral anticoagulant, follow local ED protocol regarding use of reversal agents
- ☐ Elevate HOB 30 degrees
- ☐ Discuss possible anti-seizure and ICP lowering measures with consulting neurologist

BP Management

If ischemic stroke patient is ruled ineligible for IV thrombolytic due to BP >185/110, lower to acceptable range (SBP 140-180) with agents below. For hemorrhagic stroke, lower SBP to <140 with agents below.

- ☐ Labetalol 10-20 mg IV over 1-2 minutes, may repeat x 1 ***OR***
- ☐ Nicardipine infusion: 5 mg/hr, titrate up by 2.5 mg/hr at 5-15 min intervals, max dose 15 mg/hr ***OR***
- ☐ Consider other agents (hydralazine, enalapril, clevidipine) when appropriate. AVOID NITRATES.

If BP > 180/105 during and within 24 hours after treatment with IV thrombolytic, administer the following:

- ☐ Labetalol 10 mg IV followed by continuous IV infusion 2-8 mg/min
  OR
- ☐ Nicardipine 5 mg/hr IV, titrate up to desired effect by 2.5 mg/hr q 5-15 min, max 15 mg/hr

Disposition

- ☐ Transfer patient to Primary Stroke Center or thrombectomy certified center: Primary Plus Stroke Center, Thrombectomy Capable Stroke Center or Comprehensive Stroke Center as soon as EMS team is available
- ☐ If patient meets hemorrhagic or LVO criteria, consult neurologist regarding most appropriate transfer destination.

Report the following to accepting hospital staff:

- ☐ H&P, Last Known Well, Medications, Lab results
- ☐ NIHSS at Discharge _____

Contact name: _____

Cell #: _____

Revised 10-20-22