ICU Stroke-Ischemic S/P tPA  Version 2  5/29/14

• This order set is designed to be used with an admission set or for a patient already admitted

**Nursing Orders**
- Upon admit: Perform National Institutes of Health Stroke Scale (NIHSS) and record score
- Vital Signs non unit standard post tPA (alteplase) administration every 15 minutes x 2 hour then every 30 minutes x 6 hours then hourly
- Assess neurologic status with vital signs (LOC, arm and leg weakness)
- Intake and output per unit standard
- IF unable to void for more than 6 hours: Initiate Straight Cath/BVI Protocol
- Urinary catheter initiation/management Reason for: critical care U/O monitoring
- Measure weight once a day
- Avoid excessive IV sticks any IM injections or arterial line (unless on antihypertensive continuous infusions) for 24 hours after tPA

Nasogastric/orogastric tube insertion/management
- low intermittent suction  continuous suction  no suction/ gravity
- Elevate head of bed 20-30 degrees
- Keep head of bed flat

Notify provider
- Evidence of bleeding
- Any change in neurological status
- Systolic blood pressure  > 180 mmHg or <  110 mmHg
- Diastolic blood pressure  > 105 mmHg or <  60 mmHg
- Pulse  <  50 bpm
- Respiratory Rate  > 24 bpm
- Temperature  > 99.6 F in the first 7 days and does not respond to acetaminophen for other cooling measures

- Aspiration Screen by nursing prior to oral intake.
- Notify provider :with aspiration screening results
- Do not begin oral intake until aspiration screening has been completed
- Aspiration precautions may discontinue if passes aspiration screening
- IF fails aspiration screen order ST swallow eval
- EDU Stroke: Please provide stroke education packet
- Seizure precautions
- Other Nursing orders: ____________________________

**Respiratory**
- For ventilator orders- Select Ventilator management order sets
  - Oxygen Delivery RN/RT to Determine to maintain Oxygen saturation greater than 92%
    - Nasal Cannula at _____ Lpm and titrate to maintain Oxygen saturation greater than 90%
  - Other RT orders: ____________________________

**Diet**
- NPO
- Advance diet as tolerated
- Goal diet:
  - Additional Instructions: ADVANCE DIET ONLY IF PASSES THE ASPIRATION SCREENING OR AFTER ST Swallow eval  WITH DIETARY CONSISTANCY per SPEECH PATHOLOGIST
- Other: ____________________________

**Initials**__________________________
IV/ Line Placement
- Peripheral IV insert/maintain x 2
- Arterial IV insert/maintain

IV Fluids
- Sodium Chloride 0.9% IV
- 125 milliliter/hour continuous intravenous infusion

Medications

Antihypertensives During or Post tPA:
- In the absence of a specific contraindication, it is reasonable to restart prehospital antihypertensive medications after the first 24 hours for patients with pre-existing hypertension who are neurologically stable.
- If Systolic Blood Pressure >180-230 mmHg during or post tPA Initiate Stroke-Ischemic Hypertension Protocol
- If Diastolic Blood Pressure >105-120 mmHg during or post tPA: Initiate Stroke-Ischemic Hypertension Protocol

Anticoagulants and Platelet Inhibitors
- Do not give aspirin, antiplatelet or antithrombotic medications for 24 hours after tPA infusion or if potential tPA candidate

Platelet Inhibitors
- Aspirin should be administered within 48 hours of admission (Do not start until 24 hours after tPA infusion or if potential tPA candidate) and prescribed upon discharge for patients who do not have an indication for warfarin (eg, nonrheumatic atrial fibrillation, atrial flutter, or prosthetic heart valves)
  - 81 milligram orally once a day Begin 24 hours after tPA infusion
  - 325 milligram orally once a day Begin 24 hours after tPA infusion
- For patients with acute ischemic stroke, do not use clopidogrel alone or in combination with aspirin within 48 hours of symptom onset outside of the setting of a clinical trial.
  - clopidogrel (PLAVIX)
    - 75 milligram orally once a day ; Start after carotid doppler study is complete

Vitamin K Antagonist
- For patients with noncardioembolic TIA or ischemic stroke who have no other indications for anticoagulation, do not use warfarin
- For patients with cerebrovascular disease (eg, history of TIA or stroke) associated with nonrheumatic atrial fibrillation, atrial flutter, or prosthetic heart valves, administer warfarin (COUMADIN)

warfarin (COUMADIN) with loading dose
- warfarin (COUMADIN)
  - 10 milligram orally once start on __________ Loading dose
  - 5 milligram orally once a day start on __________ maintenance dose start day after loading dose

warfarin (COUMADIN) without loading dose
- warfarin (COUMADIN)
  - 5 milligram orally once a day start on __________
  - 10 milligram orally once a day start on __________

Factor Xa Inhibitors
- rivaroxaban (XARELTO)
  - 20 milligram orally once a day , with evening meal Begin 24 hours after tPA infusion
  - 15 milligram orally once a day , with evening meal. Begin 24 hours after tPA infusion. Select for patients with GFR 15-50 ml/min [Inappropriate for patients with GFR < 15]

Initials__________
apixaban (ELIQUIST)
- 5 orally 2 times a day Begin 24 hours after tPA infusion
- 2.5 orally 2 times a day Begin 24 hours after tPA infusion Select if patient has any 2 of the following:
  - age > 80, weight < 60 kg, serum creatine > 1.5 mg/dL

**Statin Therapy**
- ACC/AHA guideline Expert Panel recommendations for the treatment of blood cholesterol levels to reduce atherosclerotic cardiovascular disease (ASCVD) - includes coronary heart disease (CHD), stroke, and peripheral arterial disease, all of presumed atherosclerotic origin.

**High-Intensity SELECT ONE:**
- High-intensity statin therapy should be initiated for adults < 75 years of age with clinical ASCVD who are not receiving statin therapy or the intensity should be increased in those receiving a low- or moderate-intensity statin, unless they have a history of intolerance to high-intensity statin therapy or other characteristics that may influence safety
  - atorvastatin (LIPITOR)
    - 40 milligram orally once a day, in the evening
    - 80 milligram orally once a day, in the evening
  - rosuvastatin (CRESTOR)
    - 20 milligram orally once a day, in the evening [Potentially inappropriate for patients of Asian descent]
    - 40 milligram orally once a day, in the evening [Potentially inappropriate for patients of Asian descent]

**Moderate-Intensity SELECT ONE:**
- Moderate-intensity statin therapy should be used in individuals in whom high-intensity statin therapy would otherwise be recommended when characteristics predisposing them to statin-associated adverse effects are present. (> 75 years of age, multiple or serious comorbidities, history of statin intolerance
  - atorvastatin (LIPITOR)
    - 10 milligram orally once a day, in the evening
    - 20 milligram orally once a day, in the evening
  - rosuvastatin (CRESTOR)
    - 5 milligram orally once a day, in the evening
    - 10 milligram orally once a day, in the evening [Potentially inappropriate for patients of Asian descent]
  - simvastatin (ZOCOR)
    - 20 milligram orally once a day, in the evening
    - 40 milligram orally once a day, in the evening

**Insulins**
- For patients with acute ischemic stroke, ensure hypoglycemia is promptly corrected and consider treatment if raised glucose levels are present; use existing guidelines for long-term goals of glycemic management

**Please select the Diabetes Management Order Set or Order Insulin Drip (with insulin infusion protocol) for insulin orders**

**Analgesics/Antipyretics**
- acetaminophen (TYLENOL)
  - 650 milligram orally every 4 hours as needed for mild pain or fever greater than 99.6 F.Notify provider if fever does not respond to acetaminophen or other cooling measures
  - 650 milligram rectally every 4 hours as needed for mild pain or fever greater than 99.6 F.Notify provider if fever does not respond to acetaminophen or other cooling measures
Laboratory

**Admission labs or labs to be obtained now:**
- Select the following admission labs only if not already done in the ER
  - CBC/AUTO DIFF
  - SED RATE (ESR)
  - Comprehensive metabolic panel
  - Magnesium level, plasma
  - Phosphorus level, plasma
  - Other:

**Morning Draw:**
- CBC/AUTO DIFF
- PT (PROTIME AND INR)
- PTT
- Comprehensive metabolic panel
- Other:

Radiology and Diagnostic Tests

**ECG**
- stat Reason for exam: ________________________________

**MRI, brain, without contrast**
- routine Reason for exam: ________________________________
  - Addition instructions: Include GRE sequence

**US Carotid Doppler**
- routine Reason for exam: ________________________________

**CTA neck**
- routine Reason for exam: ________________________________

**MRA, head, without contrast**
- routine Reason for exam: ________________________________

**MRA Neck without IV Contrast**
- routine Reason for exam: ________________________________

**MRA Neck w + w IV Contrast**
- routine Reason for exam: ________________________________

Cardiology

**ECHO, Transthoracic Complete**
- routine ICD 9 Indications: ________________________________
  - Contrast? [ ] Yes [ ] No
  - Agitated Saline (Bubble Study) [ ] Yes [ ] No
  - Additional Instructions: ________________________________

**ECHO transeophageal**
- routine **Cardiology Consult required** Reason for exam: ________________________________
  - Additional Instructions: ________________________________

**Holter Monitor**
- [ ] 24 hour [ ] 48 hour Reason for exam: ________________________________

Neurodiagnostics

**EEG**
- routine Reason for exam: rule out seizure activity

Initials: ________________________________
Consult Provider

- Provider to provider notification preferred.
  - Consult other provider: Neurologist ___________ regarding __________________
    - Does nursing need to contact consulted provider? [ ] Yes [ ] No
  - Consult other provider: Cardiologist ___________ regarding __________________
    - Does nursing need to contact consulted provider? [ ] Yes [ ] No
  - Consult other provider: Cardiovascular Surgeon ___________ regarding __________________
    - Does nursing need to contact consulted provider? [ ] Yes [ ] No

Rehabilitation Assessment - ONE OF THE FOLLOWING MUST BE SELECTED

- Effective rehabilitation interventions initiated early following stroke can enhance the recovery process and minimize functional disability.
  - Consult Rehabilitation Unit Reason for consult: ________________________________
  - PT Physical Therapy Eval & Treat Reason for consult: ____________________________
  - OT Occupational Therapy Eval & Treat Reason for consult: ________________________
  - ST Speech Therapy Eval & Treat Reason for consult: _____________________________
  - Rehabilitation assessment is not indicated Reason: ______________________________