Ischemic Stroke Alteplase Intravenous Administration Orders

- Admit to: MICU
- Stroke Unit/Neuro Step-down Unit
- Attending: ________________
- Diagnosis: ____________
- Secondary diagnoses: _______________________
- Allergies: ____________________
- Weight: ________
- Patient/family informed of benefits and risks of Alteplase including symptomatic intracranial hemorrhage rate of 6.4%.
- Symptom onset between 3 to 4.5 hours: Consent obtained from patient/family

CONTRAINDICATIONS to ALTEPLASE: (Check box if applicable)

- Evidence of ICH on pre-treatment CT
- SBP > 185 or DBP > 110 mmHg, despite treatment
- Susception of subarachnoid hemorrhage
- History of intracranial hemorrhage
- Known arteriovenous malformation or aneurysm
- Active internal bleeding
- Platelets <100,000; PTT > 40 sec after heparin use, or PT > 15 or INR > 1.7 or known bleeding diathesis

WARNINGS

- History of intracranial or spinal surgery, head trauma, or stroke (< 3 months)
- Recent major surgery or trauma [excluding head trauma] (< 15 days)
- Recent arterial puncture at non-compressible site

For suspected bleeding complication/ deterioration of neuro status:

- Stop infusion immediately, Notify MD Stat
- Stat Head CT to R/O intracranial hemorrhage
- Obtain CBC, platelet count, INR, PT, PTT, fibrinogen, D-dimer, glucose, BUN, creatinine
- Plan for blood and blood products transfusion: RBC, cryoprecipitate, platelets

Alteplase (Activase®) Initiation Order

- 100 mg/100 mL sterile water IV infusion x 1 dose

Total dose: 0.9 mg/kg x _____ kg = _______ mg

Bolus: (10% of total dose): _____ mg IV over 1 minute via smart infusion pump (Max: 9 mg)

Infusion: (90% of total dose): _____ mg IV over 60minutes via smart infusion pump (Max: 81 mg)

Vital Signs Assessment Every: BP Parameter Goal

Q 15 minutes x 2 hours Pre-Alteplase: < 185/110 mmHg
Q 30 minutes x 6 hours and
Q hour x 16 hours Post –Alteplase: <180/105 mmHg

BP Management: SBP >180mmHg and/or DBP >105mmHg:

IF HR < 60: (Select ONE of the following)

- Enalaprilat _____ mg IV Push x 1 dose, then begin Nicardipine OR Nitroprusside continuous infusion as indicated below
- Hydralazine _____ mg IV Push q 20 min x ____ dose(s), then begin Nicardipine OR Nitroprusside continuous infusion as indicated below

Continuous infusion orders: valid x 24 hrs, once continuous infusion management begins, DISCONTINUE bolus management

MD Name: ____________________ MD Signature: ____________________
RN Name: ____________________ RN Signature ____________________

Date/Time ____________________ Date/Time ____________________

Rev. 04.24.2009
Blood Glucose: Fingerstick every 6 hours
- Treat glucose > 150 mg/dL:

<table>
<thead>
<tr>
<th>Regular Insulin Sliding Scale SQ x 24 hrs for FS:</th>
<th>NEURO CHECKS</th>
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<tbody>
<tr>
<td>151 – 200 mg/dL GIVE 2 units</td>
<td>q 30 minutes x 1 hour, then q 2 hours x 23 hours</td>
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<tr>
<td>201 – 250 mg/dL GIVE 4 units</td>
<td>Notify physician if there are any changes in neuro status or patient experiences a NEW severe headache</td>
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<tr>
<td>251 – 300 mg/dL GIVE 6 units</td>
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<tr>
<td>301 – 350 mg/dL GIVE 8 units</td>
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<tr>
<td>351 – 400 mg/dL GIVE 10 units</td>
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<tr>
<td>&gt; 400 mg/dL GIVE 12 units &amp; NOTIFY MD</td>
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Temperature q 4 hours
- Acetaminophen 650 mg PO q 4 hours PRN Temp > 99 F, if pt unable to swallow administer PR x 24 hrs
- Cooling blanket to keep temp <98.0 °F

1. Other Monitoring:
   - NIHSS score after completion of alteplase infusion by physician (or Stroke Unit nurse if patient in Stroke Unit)
   - Strict I & O’s, notify physician if urine output less than ______ mL every 4 hours
   - Cardiac and O2 Sat monitoring:

2. Respiratory Therapy:
   - O2 at ______ liters per ______ nasal canula __ non re-breather mask
   - Initiate RT O2 Protocol; keep O2 Sat ≥ 95%.
     - Notify physician if
       - Patient requires O2 > 5L/min via NC
       - O2 Sat <92% (always refer to patient’s oxygenation history)
   - Ventilator Management Protocol, when required

3. Diet/IV Fluids:
   - Strict NPO (no meds) and water swallow assessment
   - NPO, but can take oral meds if cleared to swallow by physician
   - IVF: Normal Saline @___________________________ mL/hr

4. No aspirin, heparin, enoxaparin, warfarin, or other anticoagulant or antiplatelet agents for 24 hours

5. Avoid bladder catheterization and nasogastric tubes for 24 hours, if not placed prior to Alteplase infusion

6. No central lines, arterial punctures IVs or veni-puncture from hemi-paretic limb, other invasive procedures for 24 hours

7. Monitor for bleeding from puncture sites, urine, stool, emesis, other x 48 hrs.

8. Activity:
   - Strict bed rest
   - Keep head of bed 0-30° (ideally at 0° to maintain cerebral perfusion, if patient cannot tolerate can go up to 30°)
   - Reposition every 2 hours

MD Name: _______________________ MD Signature: _______________________ Date/Time: ______________________
RN Name: _______________________ RN Signature: _______________________ Date/Time: _______________________