ED Stroke- Acute Hemorrhagic: Initial Treatment

General
- GCS score/intracerebral hemorrhage score/SAPS
- Evidence for the routine use of chemical or physical cooling therapy is inconclusive

Nursing Orders
- Cardiac monitor
- Vital signs: monitor blood pressure every 15 minutes x 2 hour then every 30 minutes x 6 hour then every hour
- Assess neurologic status every 5 minutes x 3 then every 15 minutes x 1 hour then hourly (LOC, arm and leg weakness)
- Goal systolic blood pressure less than 150 within 60 minutes of arrival

IV/ Line Placement
- Peripheral IV insert/maintain start 2nd IV
- Arterial IV insert/maintain

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

Medications
- For patients who have intracerebral hemorrhage associated with warfarin use SELECT:
  - **For any other anticoagulant associated hemorrhage please use the Anticoagulation Reversal Order Set Select vitamin K with ONE KCentra
  - phytodiolone (VITAMIN K) in 50 mL Normal Saline
    - 10 milligram intravenously once Infuse over 10 minutes
  - Kcentra
    - 25 unit/kilogram intravenously [MAX 2500 units] Select for INR 2 to less than 4; Infusion rate not to exceed 8.4 mL/min (210 units/minute)
    - 35 unit/kilogram intravenously [MAX 3500 units] Select for INR 4-6; Infusion rate not to exceed 8.4 mL/min (210 units/minute)
    - 50 unit/kilogram intravenously [MAX 5000 units] Select for INR greater than 6; Infusion rate not to exceed 8.4 mL/min (210 units/minute)

Hypertension Treatment
- For patients without contraindications who have intracerebral hemorrhage with systolic BP between 150 and 220 mm Hg, consider reduction to < 140 mm Hg.
- For systolic BP greater than 180 mm Hg or mean arterial pressure greater than 130 mm Hg and suspected elevated ICP, consider ICP monitoring and use intermittent or continuous antihypertensive to maintain cerebral perfusion pressure greater than or equal to 60 mm Hg
  - IF Systolic Blood Pressure > 150 mmHg: Initiate Stroke- Hemorrhagic Hypertension Protocol
  - IF Diastolic Blood Pressure > 105 mmHg: Initiate Stroke- Hemorrhagic Hypertension Protocol

Antiepileptics
- Appropriate antiepileptic therapy should be used to treat clinical seizures
- Do not give antiepileptic drugs for prophylaxis of seizures
  - Lorazepam (ATIVAN)
    - 4 milligram intravenously once
  - Fosphenytoin (CEREBHYX)
    - 15 milligram/kilogram intravenously once as phenytoin equivalents; loading dose

Initials__________
Laboratory

Blood Bank

- For patients with an elevated INR, consider the use of clotting factors or fresh frozen plasma
- For patients with severe thrombocytopenia or with a severe coagulation factor deficiency, appropriate platelet transfusions or factor replacement therapy should be given

**Fresh Frozen Plasma (FFP) Orders:**

- **FFP (BBK)**
  - Quantity: 
  - If product is for OR, when (if known): 
  - Special Instructions for Blood Bank: 

- **FFP Transfuse Nurse Instructions**
  - units to transfuse: 
  - Hold maintenance IV fluid during transfusion [ ] Yes [ ] No 
  - Additional instructions for nursing: 
    - Use Normal Saline ONLY with transfusion of FFP. May start second Peripheral IV if needed for transfusion

- **Platelet Orders:**
  - Platelets (BBK)
    - Quantity: 
    - Irradiated
    - CMV negative
    - If product is for OR, when (if known):
    - Special Instructions for Blood Bank: 

- **Platelet Transfuse Nurse Instructions**
  - units to transfuse: 
  - Duration: 
  - Hold maintenance IV fluid during transfusion [ ] Yes [ ] No 
  - Additional instructions for nursing: 
    - Use Normal Saline ONLY with transfusion of platelets. May start second Peripheral IV if needed for transfusion

Consult Provider

- Provider to provider notification preferred.
- For patients with intracerebral hemorrhage, consult neurosurgery for surgical evaluation [Evidence]
- Consult Neurosurgeon: [Evidence]
  - Consult other provider regarding 
    - consulted provider? [ ] Yes [ ] No

- Consult Neurologist:
  - Consult other provider regarding 
    - consulted provider? [ ] Yes [ ] No

Provider Signature: ___________________________ Date: ________ Time: ________