### Ischemic Stroke Clinical Pathway

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<tr>
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<tbody>
<tr>
<td>NEURO ICU/Step-Down Unit</td>
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</table>

#### Orders: Treatments
Refer to the ED Stroke Algorithm

- Patient exam: review history, exam, labs, medications, imaging
- Check VS/Neuro every 2 hours or per M.D. order
- Strict I & O's
- Cardiac Monitoring
- Daily weight as ordered
- PT/OT ordered
- Speech and Swallow Eval
- VTE Prophylaxis as appropriate
- Notify Primary Care MD if appropriate
- Discuss probable discharge date and needs with patient and family

- Patient exam: review history, exam, labs, medications, imaging
- Check VS/Neuro every 4 hours or per M.D. order
- Discuss Rehab/SNF placement with patient and family
- Daily weight as ordered
- Strict I & O's
- PT/OT as ordered
- Nursing Standard of Care
- Stroke Video for Patient and/or Family

- Patient exam: review history, exam, labs, medications, imaging
- Check VS/Neuro every 4 hours or per M.D. order
- Continue I & O's as indicated
- PT/OT as ordered
- Nursing Standard of Care
- Arrange primary care and/or Neuro follow-up

- Patient exam: review history, exam, labs, medications, imaging
- Check VS/Neuro every 4 hours or per M.D. order
- Continue I & O's as indicated
- PT/OT as ordered
- Nursing Standard of Care
- Arrange primary care and/or Neuro follow-up if discharged
- Write prescriptions if discharged home
- Dictate a summary if discharged
- Repeat Stroke Video for Patient and/or Family if necessary

- Patient exam: review history, exam, labs, medications, imaging
- Check VS/Neuro every 4 hours or per M.D. order
- Continue I & O's as indicated
- PT/OT as ordered
- Nursing Standard of Care
- Arrange primary care and/or Neuro follow-up if discharged
- Write prescriptions if discharged home
- Dictate a summary if discharged

#### Assessment

- NIH Stroke Scale by certified nurse or M.D.
- Neuro (RN) assessment: Aspiration precautions
  - Assess skin integrity
  - Fall risk (Braden Scale)
  - Swallow assessment as needed
  - Assess for discharge needs

- Neuro (RN) assessment: Aspiration precautions
  - Assess skin integrity
  - Fall risk (Braden Scale)
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  - Assess for discharge options

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### Indicators

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### Lab Tests

- CBC w/diff
- PT/PTT
- BMP
- Lipid Screen (first am blood draw)
- Homocysteine,
- Lupus Anticoagulant
- DRVVT
- Anticardiolipin Ab
- Hemoglobin A1C
- Plavix 2C19 Genotype
- Sed rate
- Urine toxicology screen
- Oximetry Spot Check every _____ hrs.
- If pulse oximetry spot check is < 92% Saturation call house officer
  - O2 _____ liters
  - 02 PRN as indicated
- CBC as indicated
- BMP as indicated
- Oximetry Spot Check every _____ hrs.
- If pulse oximetry spot check is < 92% Saturation call house officer
  - O2 _____ liters
  - 02 PRN as indicated

### Orders:

#### Labs - Tests

- Brain CT
- Head CTA
- Neck CTA
- MRI LASH (limited acute stroke head for acute stroke < 10 hours from onset)
- Intracranial Brain MRA with contrast
- Extracranial Brain MRA with contrast
- Brain MRI Perfusion
- Brain CT Perfusion
- Brain CT
- MRI Brain, Intracranial Brain MRA with contrast
- Extracranial Brain MRA with contrast
- Brain MRI Perfusion
- Brain CT Perfusion
- Consider if indicated:
  - Brain CT
  - MRI Brain
  - Intracranial Brain MRA with contrast
  - Extracranial Brain MRA with contrast
  - Brain MRI Perfusion
  - Brain CT Perfusion
- Consider if indicated:
  - Brain CT
  - MRI Brain, Intracranial Brain MRA with contrast
  - Extracranial Brain MRA with contrast
  - Brain MRI Perfusion
  - Brain CT Perfusion
- Consider if indicated:
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  - Brain MRI Perfusion
  - Brain CT Perfusion
- Consider if indicated:
  - Brain CT
  - MRI Brain, Intracranial Brain MRA with contrast
  - Extracranial Brain MRA with contrast
  - Brain MRI Perfusion
  - Brain CT Perfusion

### Orders:

#### Labs - Tests

- CBC as indicated
- BMP as indicated
- Oximetry Spot Check every _____ hrs.
- If pulse oximetry spot check is < 92% Saturation call house officer
  - O2 _____ liters
  - 02 PRN as indicated
- Electrolyte panel as indicated
- Repeat fasting lipid
- Approx 30 days from discharge
- Follow-up appt scheduled

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<tr>
<td>Admit to Neuro ICU/Step-Down Unit</td>
<td>Heparin 5000 Units (sq) BID or Calf compression</td>
<td>Heparin 5000 Units (sq) BID or Calf compression</td>
<td>Heparin 5000 Units (sq) BID or Calf compression</td>
<td>Heparin 5000 Units (sq) BID or Calf compression</td>
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</tr>
<tr>
<td><strong>ANTIPLATELET THERAPY:</strong></td>
<td>Aspirin __ mg per rectum Daily</td>
<td>Aspirin __ mg per rectum Daily</td>
<td>Aspirin __ mg per rectum Daily</td>
<td>Aspirin __ mg per rectum Daily</td>
<td>Aspirin __ mg per rectum Daily</td>
<td>Aspirin __ mg per rectum Daily</td>
</tr>
<tr>
<td></td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
<td>Aspirin Enteric Coated, E.C. tablet ___ mg 1 tab PO Daily</td>
</tr>
<tr>
<td></td>
<td>Dipyridamole (Persantin) tab 75 mg, 1 tab, PO three times a day</td>
<td>Dipyridamole (Persantin) tab 75 mg, 1 tab, PO three times a day</td>
<td>Dipyridamole (Persantin) tab 75 mg, 1 tab, PO three times a day</td>
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</tr>
<tr>
<td></td>
<td>Clotidipine (Flavix) tab 75 mg 1 tab, PO Daily</td>
<td>Clotidipine (Flavix) tab 75 mg 1 tab, PO Daily</td>
<td>Clotidipine (Flavix) tab 75 mg 1 tab, PO Daily</td>
<td>Clotidipine (Flavix) tab 75 mg 1 tab, PO Daily</td>
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<tr>
<td><strong>HYPERCHOLESTEROL THERAPY:</strong></td>
<td>Atorvastatin ___ mg PO nightly at bedtime</td>
<td>Atorvastatin ___ mg PO nightly at bedtime</td>
<td>Atorvastatin ___ mg PO nightly at bedtime</td>
<td>Atorvastatin ___ mg PO nightly at bedtime</td>
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<tr>
<td></td>
<td>Tylenol 650mg (o) every 6hrs prn for temp &gt;37.5 rectal or oral</td>
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<tr>
<td></td>
<td>Famotidine 20mg IV every 12 hrs</td>
<td>Famotidine 20mg IV every 12 hrs</td>
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<td>Famotidine 20mg IV every 12 hrs</td>
<td>Famotidine 20mg IV every 12 hrs</td>
</tr>
<tr>
<td></td>
<td>IV NS with 20 meq KCl per lit at ___ mL per hour</td>
<td>IV NS with 20 meq KCl per lit at ___ mL per hour</td>
<td>IV NS with 20 meq KCl per lit at ___ mL per hour</td>
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<tr>
<td></td>
<td>Warfarin____mg PO daily</td>
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Revised Oct. 2011

Vivek, J. MD, Cramer, S. MD, Stradling, D., RN, Care Management Services
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<tr>
<td><strong>BLOOD PRESSURE TX ONLY</strong></td>
<td>IF BP &gt; 220/110 per MD order</td>
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<tr>
<td>Labetolol 5 mg IV push now may repeat in 20 min. If SBP still over 220 and diastolic over 110, notify House Officer STAT</td>
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<td>Diuretic, Beta Blocker, Ace Inhibitor</td>
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<td>NSAIDS, protocol, titration, goal and rate per MD order.</td>
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<td><strong>AVOID SEDATIVES, HYPNOTICS, OPIOIDS, ANALGESICS!</strong></td>
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**Nutrition**

- Consider Keofeed tube if prolonged NPO
- NPO: Now until swallow screen is done. Diet to be based on swallow screen or evaluation and nutritional screening
- Assess Diet/Swallow as needed and advance as tolerated
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**Consults**

- Rehab consult: Swallow & Speech therapy, PT, OT, pm Neuro Rehab Team Neurology, if not Neuro Primary Cardiology or medicine consult as indicated Case Mgr Social Worker Spiritual Care
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**Activity**

- Head of bed at 30 degrees PT/OT evaluation OOB w/assistance as per MD order Range of motion every 8hrs for patients with restricted mobility as indicated
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<td><strong>Teaching Plan</strong></td>
<td>Research protocol initiated if indicated.</td>
<td>Optimize Cerebral Perfusion Adequate hydration maintained Patient/family will verbalize personal risk factors for stroke, signs &amp; symptoms of stroke</td>
<td>Optimize cerebral perfusion Adequate hydration maintained Patient/family will verbalize personal risk factors for stroke, signs &amp; symptoms of stroke and the need to call 911 if experiencing a stroke at home No Signs &amp; Symptoms of decreased bodily function Stroke prevention strategy selected Patient/family will verbalize safe discharge plan</td>
<td>Stroke etiology clarified, if applicable Optimize cerebral perfusion Adequate hydration maintained Patient/family will verbalize stroke definition, likely cause of own stroke if possible Patient/family will verbalize personal risk factors for stroke, signs &amp; symptoms of stroke and the need to call 911 if experiencing a stroke at home No Signs &amp; Symptoms of decreased bodily function Stroke prevention strategy selected Patient/family will verbalize safe discharge plan</td>
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