Neurologic changes in patient:
- New or acute change in mental status or LOC
- Sudden unilateral weakness or numbness of the face or arm or leg
- Sudden trouble seeing in one or both eyes
- Sudden confusion, agitation, or delirium
- Sudden trouble speaking, slurred speech, or understanding
- Sudden unexplained lethargy/difficulty to arouse
- New onset seizure activity
- Sudden severe headache with no known cause
- Sudden onset blown pupil

Staff calls 8-2222 for STROKE ALERT activation and provides name of person initiating the call, patient location, and call back number. This will activate the Stroke Team and Rapid Response Team (RRT).

Neurologist provider assesses the patient, reviews history and places orders for: STAT non-contrast CT, EKG, CRITICAL stroke labs, finger stick glucose, start 2 IV’s, obtain vital signs (treat if necessary), oxygen saturation, neuro checks, NIHSS, place in monitored bed, monitor airway, keep NPO, obtain last known well and weight. The Rapid Response Nurse is responsible for tPA administration and remains with patient during tPA administration (full hour regardless of setting) and during the evaluation/assessment stages until admission to a stroke bed. Patient will go to a higher level of care as indicated.

Possible IV tPA candidate:
Physician reviews patient condition with patient and/or family and discusses risks and benefits of IV tPA. Discussion and criteria used to determine administration of IV tPA are documented by the provider.

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Not an IV tPA candidate:
Document Inclusion/Exclusion

Hemorrhagic Stroke:
Consider neurosurgery consult

Continue neuro checks and consider anti-thrombotic therapy or neurosurgical intervention. Admit to appropriate level of care

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Inclusion criteria < 3 hrs from symptom onset
- Diagnosis of ischemic stroke causing measurable neurological deficit
- Onset of symptoms < 3 hours before beginning treatment
- Aged ≥ 18 years

Exclusion criteria < 3 hrs from symptom onset
- Significant head trauma or prior stroke in previous 3 months
- Symptoms suggest subarachnoid hemorrhage
- Arterial puncture at non-compressible site in previous 7 days
- History of previous intracranial hemorrhage
- Intracranial neoplasm, arteriovenous malformation, or aneurysm
- Recent intracranial or intra-spinal surgery
- Elevated blood pressure (systolic > 185 mm Hg or diastolic > 110 mm Hg)
- Active internal bleeding
- Acute bleeding diathesis, including but not limited to
  - Platelet count < 100 000/mm³
  - Heparin within 48 hours, resulting in abnormally elevated aPTT greater than the upper limit of normal
  - Current use of anticoagulant with INR > 1.7 or PT > 15 seconds
  - Current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)
  - Blood glucose concentration <50 mg/dL
  - Current use of anticoagulant with INR
  - Recent experience suggests that under some circumstances any of these relative contraindications are present:
  - Recent intracranial or intra-spinal surgery
  - Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)
  - Major surgery or serious trauma within previous 14 days
  - Recent acute myocardial infarction (within previous 3 months)

Relative exclusion criteria < 3 hrs from symptom onset
- Recent experience suggests that under some circumstances—with careful consideration and weighting of risk to benefit—patients may receive fibrinolytic therapy despite 1 or more relative contraindications are present:
  - Only minor or rapidly improving stroke symptoms (clearing spontaneously)
  - Pregnancy
  - Seizure at onset with postictal residual neurological impairments
  - Major surgery or serious trauma within previous 14 days
  - Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)
  - Recent acute myocardial infarction (within previous 3 months)

Inclusion criteria 3 - 4.5 hrs symptoms onset
- Diagnosis of ischemic stroke causing measurable neurological deficit
- Onset of symptoms within 3 to 4.5 hours before beginning treatment

Relative exclusion criteria 3 - 4.5 hrs symptoms onset
- All relative exclusion criteria < 3 hours symptom onset
- Aged ≥ 18 years
- Severe stroke (NIHSS > 25)
- Taking an oral anticoagulant regardless of INR
- History of both diabetes and prior ischemic stroke

IV tPA is located in the EC, SICU and BICU PYXIS. IV tPA is weight based and may be given by the Physician, PA or Rapid Response Nurse. Call Pharmacy at 358-2888 for IV tPA support if needed.

Consider insertion of NG tube, foley, central line or PICC prior to IV tPA or held until 24 hours past IV tPA infusion. May place ≤ 24 hours if benefits > risks.

Document VS and neuro checks q 15 min for the first 2 hours after tPA initiation, then every 30 minutes x 6 hours, then hourly x 16 hours (until 24 hours post IV tPA initiation).

Patient is admitted to monitored Neuroscience bed.
EKG monitoring
Maintain SBP < 180 and DBP < 105 mm Hg.
No heparin, warfarin, or antiplatelet medication for 24 hours post tPA if appropriate.
Monitor for bleeding. Initiate anti-thrombotic therapy 24 hours after tPA if appropriate.
Patient to remain NPO until after passes Dysphagia Screen.


Approved by Stroke Committee: 5/2015; Approved by P&T Committee: 5/2015