

# Stroke Alert

Call the operator at 8555 and request a "Stroke Alert"

Make sure the patient has  $\geq 20$ g PIV in arm, or Power CVC/Power PICC

**TIME IS OF THE ESSENCE!!!**

## Inpatient Stroke Alert goals:

1. Physician assessment within 15 minutes
2. Stroke Labs within 10 minutes
3. Stroke Protocol CT within 25 minutes
4. Imaging and lab results communicated within 45 minutes
5. IV t-PA within 60 minutes (if applicable)

## Criteria:

1. New symptoms or less than 8 hours since last witnessed normal
2. Numbness, weakness, or complete paralysis of the face, arm, and/or leg, especially on one side of the body.
3. Difficulty speaking or understanding simple sentences.
4. Decreased vision, double vision, or transient blindness in one eye.
5. Unexplained dizziness, loss of balance, or sudden falls.
6. Severe thunderclap headache with no known cause or suspected to be due to ICH or AIS.

## The following diagnostic testing should be anticipated:

1. STAT finger stick blood sugar
2. STAT set of vital signs including heart rate, blood pressure, O2 saturation, respiratory rate, and temperature
3. STAT laboratory tests: Listed as "Stroke Alert Panel" in EHR
4. STAT Stroke CT Protocol (may be modified as needed by the Stroke Team)

## General Management Considerations

1. Supplemental O2
2. NPO
3. Avoid glucose containing infusions
4. Allow blood pressure autoregulation but avoid hypotension (SBP  $< 90$  or MAP  $< 65$ ) and treat SBP  $> 220$  or DBP  $> 120$  (See below for BP goals if t-PA is planned) May need lower goals in setting of aortic dissection, aneurysm, carotid surgery, pre-eclampsia, acute MI, CHF, hypertensive urgency, or concern for intracranial hemorrhage or elevated ICP
5. Goal normothermia
6. Goal normoglycemia

## Thrombolytic Therapy for Acute Ischemic Stroke (AIS)

Administration in the Setting of Acute Ischemic Stroke Procedure

1. Patient Care Considerations prior to Thrombolytic Therapy
  - a. Indications for use: AIS within 4.5 hours of symptom onset or when last known to be without stroke symptoms. The decision to treat AIS should be made together by the Stroke Team and the ED team or, in the case of an inpatient with AIS, the primary admitting team.

- b. Absolute and relative contraindications. Physician discretion may override contraindications as warranted by the patient's condition. The decision to treat the patient and the type(s) of treatment(s) should be made collaboratively under the direction of the Stroke Team by all appropriate teams involved in the care of the particular patient and utilizing the most current American Heart/American Stroke Association Clinical Practice Guidelines.

### **Administration**

Utilize Epic order set: "IP NEU ISCHEMIC STROKE: ALTEPLASE (T-PA) ADMINISTRATION." **The Stroke Team will order IV t-PA.** The total t-PA dose is 0.9 mg/Kg (actual body weight, up to a maximum of 90 mg). Ten percent of the total dose will be administered by IV push and the remainder over 60 minutes.

### **Patient care considerations post thrombolytic therapy:**

1. **Monitoring:**
  - a. **Side effects: bleeding.**
  - b. **Signs of allergic reaction:** hypotension, tachycardia, angioedema, stridor, bronchospasm, and/or rash.
  - c. **Blood pressure goals:**
    - i. Systolic blood pressure (SBP) remains less than or equal to 185 mm Hg prior to administering.
    - ii. SBP should be maintained less than 180 mm Hg during and after administration and may require use of anti-hypertensive medications (see t-PA preprinted order set).
  - d. **Vital signs and neurological checks** will be performed as follows:
    - i. every 15 min for 2 hours and then
    - ii. every 30 min for 6 hours and then
    - iii. every hour for 16 hours.
2. **Limit arterial, venous, muscular, and subcutaneous punctures.** If possible, avoid discontinuing peripheral IV or arterial access during infusion and for twenty-four hours after therapy completed. If possible, avoid NG or ET tube placement once thrombolytic therapy has been initiated.
3. **Precautions:** If during or after administration of t-PA the patient exhibits any acute change in mental or neurological status (including but not limited to unresponsiveness, pupillary changes, headache, or seizure), stop the infusion immediately and notify the M.D. on call. Prepare for emergent head CT.