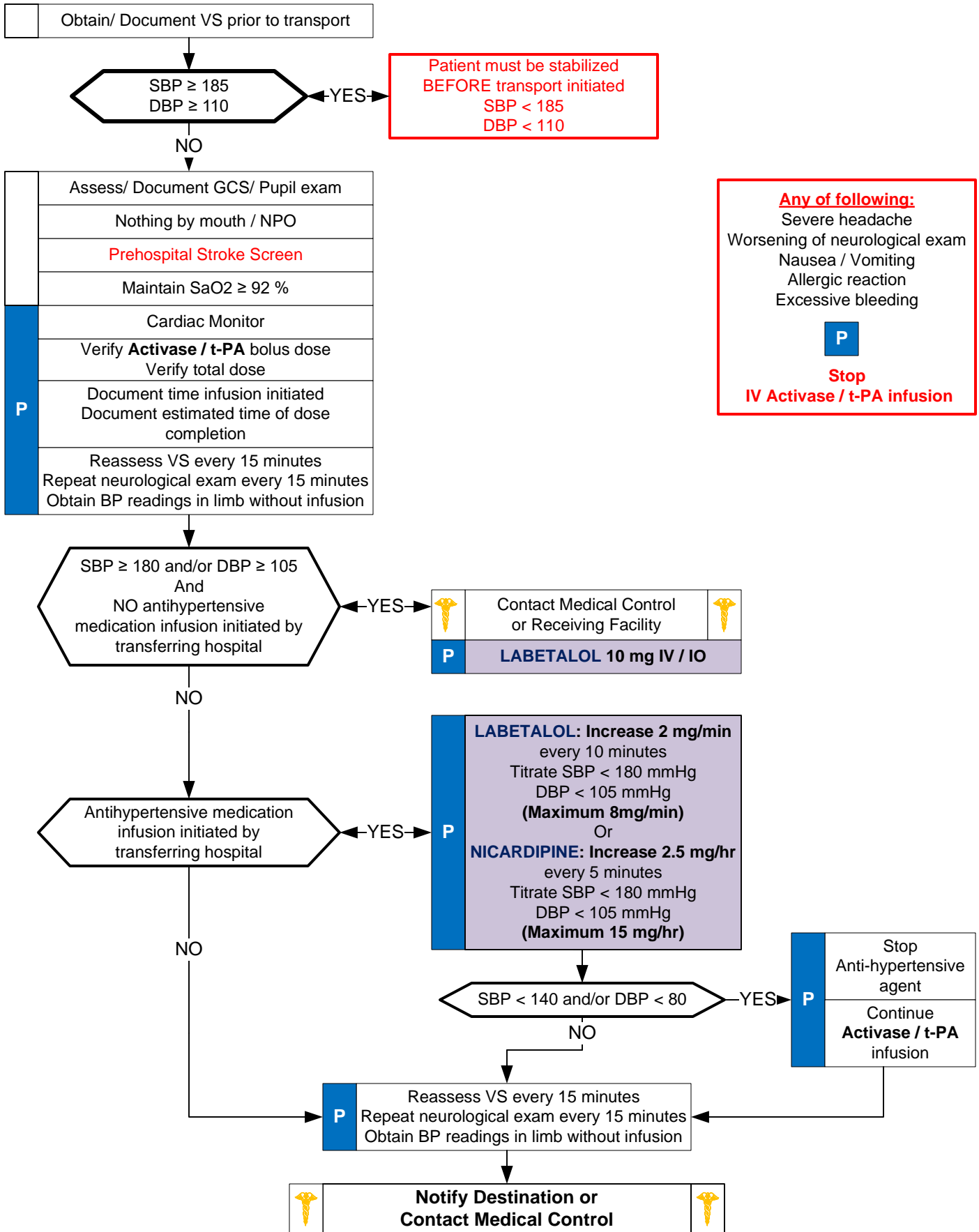




SUSPECTED STROKE: ACTIVASE / T-PA



Adult Medical Protocol Section



SUSPECTED STROKE: ACTIVASE / T-PA

Hypertension during t-PA Infusion:

When SBP is ≥ 180 and DBP is ≥ 105 , Labetalol 10 mg IV push may be administered. Medical Control or receiving Stroke Center (preferred) should be contacted for further orders concerning blood pressure management after this initial dose. This assumes antihypertensive medications are not infusing from transferring hospital.

Nicardipine (Cardene):

Common antihypertensive which may be initiated by transferring facility. Used for blood pressure management. Calcium channel blocker.

Common reactions:

Headache, peripheral edema, dizziness, nausea/vomiting, tachycardia, palpitations

Adverse reactions:

AV block, Ventricular Tachycardia, angina exacerbation, allergic reactions

Labetalol (Normodyne):

Common antihypertensive which may be initiated by transferring facility (infusion) or administered during transport with Medical Control orders. Used for blood pressure management. Beta blocker.

Contraindications:

Asthma, CHF, 2nd° or 3rd° heart block, bradycardia

Common reactions:

Headache, postural hypotension, dizziness, diaphoresis

Adverse reactions:

Bradycardia, ventricular dysrhythmias, allergic reactions

Target SBP and DBP during t-PA administration:

A SBP of 170-180 and a DBP of 95-105 is a reasonable target range. Main target is to keep SBP < 180 and DBP < 105 during and following t-PA administration. While aggressive blood pressure control is warranted during t-PA administration, episodes of hypotension give rise to increased morbidity and mortality. Be cautious in titrating antihypertensive medications with the idea that slow and steady reduction is key. Wide and quick swings in blood pressure can worsen condition.

Hypotension:

Hypotension should be aggressively treated as this can worsen cerebral perfusion pressure and outcomes. Unless contraindicated, keep head of bed elevated 20-30 degrees.

Pearls

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro**
- **This protocol is optional. Agencies may develop their own in conjunction with their regional stroke center(s) guidance.**
- **This protocol is intended for interfacility transfer patients only. Medication must be started at initial treating hospital.**
- **Items in Red Text are key performance measures used in protocol compliance.**
- **The Reperfusion Checklist should be completed for any suspected stroke patient.**
- **Time of Onset or Last Seen Normal:**
 - **One of the most important items the pre-hospital provider can obtain, of which all treatment decisions are based.**
 - **Be very precise in gathering data to establish the time of onset and report as an actual time (i.e. 13:47 NOT "about 45 minutes ago.")**
 - **Without this information patient may not be able to receive thrombolytics at facility.**
 - **Wake up stroke: Time starts when patient last awake or symptom free.**
- **Time of Symptom Discovery:**
 - **Time when symptoms of stroke are first noticed by patient, bystanders, witnesses, or family/ caregivers.**
- The differential listed on the Altered Mental Status Protocol should also be considered.
- Be alert for airway problems (swallowing difficulty, vomiting/aspiration).
- Hypoglycemia can present as a localized neurologic deficit, especially in the elderly.
- **Infusion Pump Alarm / No Flow:**
 - Remove drip chamber from Activase / t-PA bag.
 - Spike Activase/ t-PA drip chamber to NS bag.
 - Restart infusion to complete medication remaining in IV tubing.
- **Medication dosing safety:**
 - When IV **Activase/ t-PA** dose administration will continue en route, verify estimated time of completion.
 - Verify with sending hospital that excess **Activase/ t-PA** has been withdrawn from the bottle and wasted.
 - This ensures the bottle will be empty when the full dose is finished. *For example, if the total dose is 70 mg, then 30 cc should be withdrawn and wasted since a 100 mg bottle of **Activase/ t-PA** contains 100 mL of fluid when reconstituted.*
 - Sending hospital should apply a label to **Activase/ t-PA** bottle with the number of mL of fluid that should be in the bottle in case of pump failure during transit.
- **Allergy Anaphylaxis:**
 - **Activase/ t-PA**, is structurally identical to endogenous t-PA and therefore should not induce allergy, single cases of acute hypersensitivity reactions have been reported.
 - **Angioedema:**
 - Rapid swelling (edema) of the dermis, subcutaneous tissue, mucosa and submucosal tissues. Typically involves the face, lips, tongue and neck.
 - Almost always self limiting but may progress to interfere with airway / breathing so close monitoring is warranted.
 - Utilize the Allergy / Anaphylaxis Protocol as indicated and also for angioedema. Infusion should be stopped.
 - Give all medications related to the Allergy/ Anaphylaxis Protocol by IV route only as patient should remain NPO.