

Suspected Stroke

History

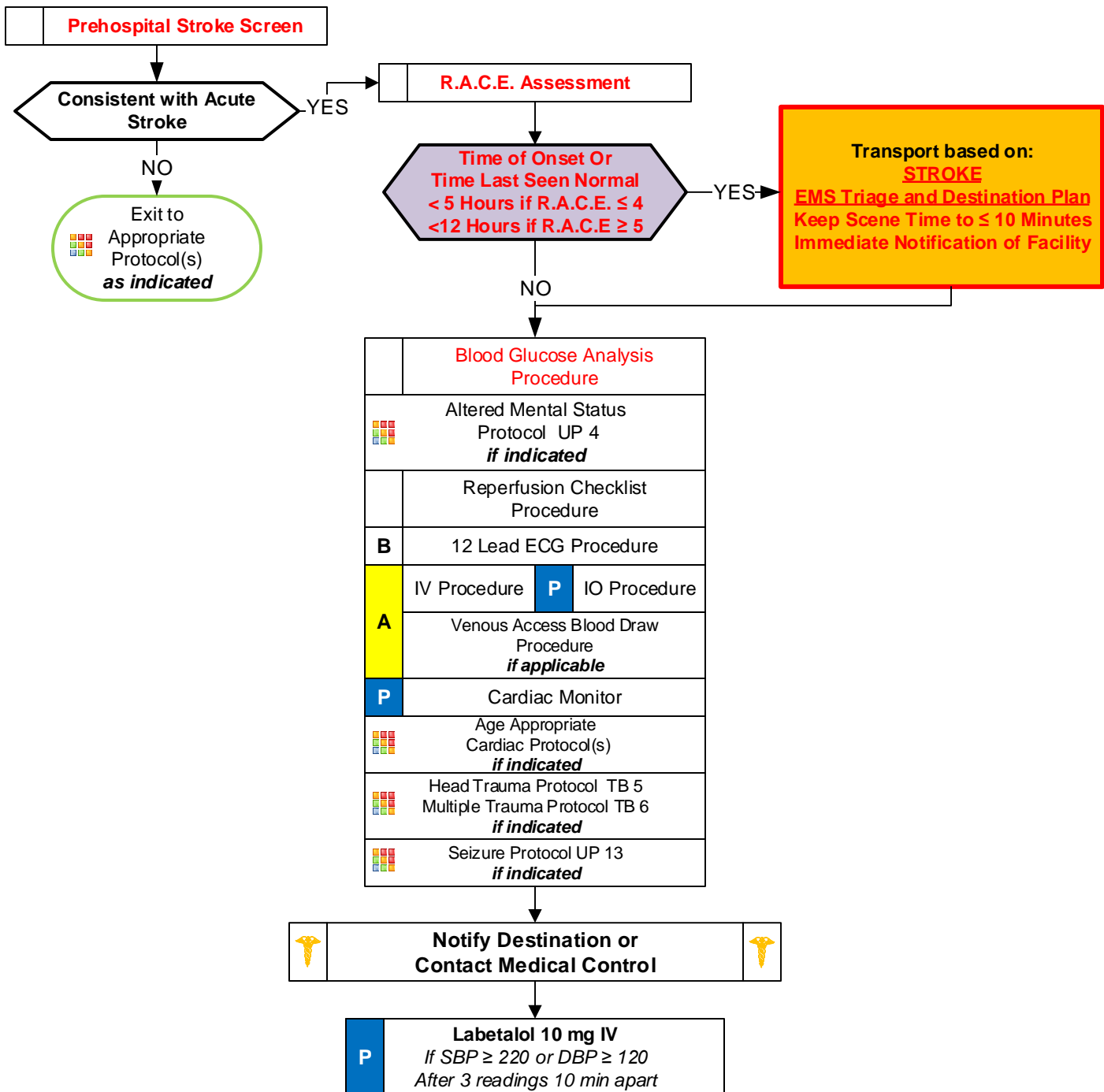
- Previous CVA, TIA's
- Previous cardiac / vascular surgery
- Associated diseases: diabetes, hypertension, CAD
- Atrial fibrillation
- Medications (blood thinners)
- History of trauma
- Sickle Cell Disease
- Immune disorders
- Congenital heart defects
- Maternal infection / hypertension

Signs and Symptoms

- Altered mental status
- Weakness / Paralysis
- Blindness or other sensory loss
- Aphasia / Dysarthria
- Syncope
- Vertigo / Dizziness
- Vomiting
- Headache
- Seizures
- Respiratory pattern change
- Hypertension / hypotension

Differential

- See Altered Mental Status
- TIA (Transient ischemic attack)
- Seizure
- Todd's Paralysis
- Hypoglycemia
- Stroke
 - Thrombotic or Embolic (~85%)
 - Hemorrhagic (~15%)
- Tumor
- Trauma
- Dialysis / Renal Failure



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Pearls

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro**
- **Items in Red Text are key performance measures used in the EMS Acute Stroke Care Toolkit.**
- **Acute Stroke care is evolving rapidly. Time of onset / last seen normal may be changed at any time depending on the capabilities and resources of your hospital based on Stroke: EMS Triage and Destination Plan.**
- **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.**
- **You are often in the best position to determine the actual Time of Onset while you have family, friends or caretakers available. Often these sources of information may arrive well after you have delivered the patient to the hospital. Delays in decisions due to lack of information may prevent an eligible patient from receiving thrombolytics.**
- **The Reperfusion Checklist should be completed for any suspected stroke patient. With a duration of symptoms of less than 5 hours if R.A.C.E \leq 4 or 12 hours if R.A.C.E \geq 5, scene times should be limited to \leq 10 minutes, early notification / activation of receiving facility should be performed and transport times should be minimized.**
- **If possible place 2 IV sites.**
- **Blood Draw:**
 - **Many systems utilize EMS venous blood samples. Follow your local policy and procedures.**
 - **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.**
 - **Document the Stroke Screen results in the PCR.**
 - **Agencies may use validated pre-hospital stroke screen of choice.**
- **Pediatrics:**
 - **Strokes do occur in children, they are slightly more common in ages $<$ 2, in boys, and in African-Americans.**
 - **Newborn and infant symptoms consist of seizures, extreme sleepiness, and using only one side of the body.**
 - **Children and teenagers symptoms may consist of severe headaches, vomiting, sleepiness, dizziness, and/or loss of balance or coordination.**