

# Suspected Stroke

- 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

### Signs and Symptoms

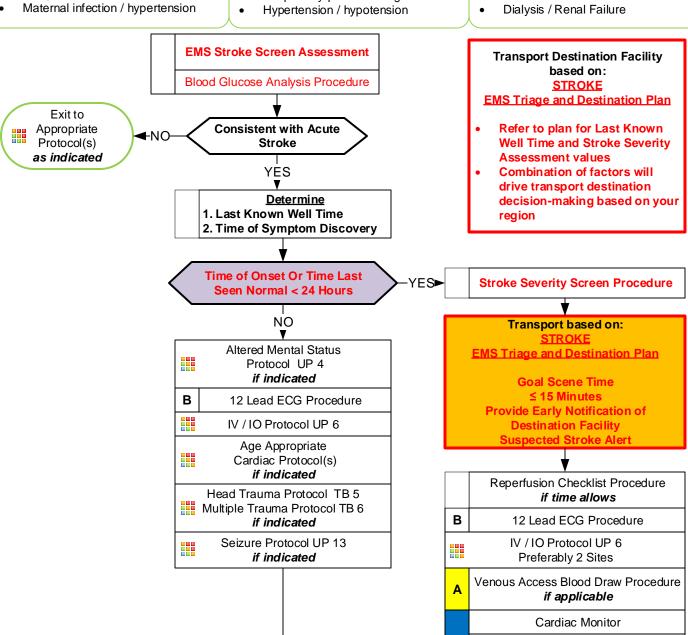
- Altered mental status
- Weakness / Paralysis
- Blindness or other sensory loss
- Aphasia / Dysarthria
- Syncope
- Vertigo / Dizziness
- Vomiting
- Headache
- Seizures
- Respiratory pattern change

### **Differential**

- See Altered Mental Status
- TIA (Transient ischemic attack)
- Seizure
- Todd's Paralysis
- Hypoglycemia
- Stroke

Thrombotic or Embolic (~85%) Hemorrhagic (~15%)

- Tumor
- Trauma



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**Persistent Hypertension** 

If SBP ≥ 185 or DBP ≥ 110 After 3 readings all 5 minutes apart Contact Receiving Facility

Concerning Treatment of Hypertension

**Notify Destination or** 

**Contact Medical Control** 



# Suspected Stroke

MEND Exam used in Columbus County.

## **Pearls**

- Recommended Exam: EMS Stroke Screen and Severity Assessment, Mental Status, 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 or well may be changed at any time
  depending on the capabilities and resources of your regional hospitals based on Stroke: EMS Triage and
  Destination Plan.
- Time of Onset or Last Seen Normal or Well:

One of the most important items the pre-hospital provider can obtain, of which all treatment decisions are based.

Be 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 care may be delayed 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 or witness.

• Sources of information pertaining to Last Known Well time:

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 negatively impact care.

Obtain contact information (phone number and name) of witnesses and give to facility providers.

- The Reperfusion Checklist should be completed for any suspected stroke patient as time allows.
- 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, Stroke Severity Score, and facility notification time 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.