

SRMC / Ada-Liberty EMS Stroke – Cerebrovascular Accident (CVA) Protocol


1. Establish and maintain an open airway. Suction as needed.
2. Support with supplemental **OXYGEN**.
3. Establish the exact time of onset of symptoms, or the time when the patient was last known to be acting normally (Last Known Well). Relay this information to the ED when giving a report to the hospital.
4. Obtain a **Blood Glucose** level.
5. Include the **BEFAST Stroke Assessment** (balance, eyes, facial droop, arm drift, slurred speech) in your patient assessment and make the hospital aware of your findings.
6. If **BEFAST Stroke Assessment** reveals positive findings, complete a **Stroke VAN Assessment**. If the patient is noted to be VAN Positive, make the hospital aware of your findings.
7. When appropriate due to assessment signs/symptoms noted, advise of a **STROKE ALERT** on hospital call in report. (SEE STROKE ASSESSMENT TOOL)
8. Keep the patient supine, unless there is marked Hypertension. If the patient is hypertensive, place the patient in a semi-fowlers position, after evaluating for the presence any trauma and/or potential c-spine injury.
9. Monitor and record vital signs, EKG, and oxygen saturation.
10. Establish an IV of NS at a TKO rate. If at all possible, it is preferential to start a larger IV (at least 18G) in the Right AC of the suspected stroke patient. (This give the best pictures when a CT Angiogram is needed). If this is not practical initially, get an IV established (any size, any location), then look for a second IV line at the Right AC with a larger needle.

Note: **ASPRIN** is NOT indicated in the pre-hospital setting of acute CVA prior to non-contrast CT scan at the ED.


11. Obtain/document **PASTA Patient History**:
 - a. Past Medical History (HTN, AFib, Diabetes, previous TIA/CVA, etc.)
 - b. Age of Patient
 - c. Stroke Scale Symptoms (BEFAST – explain deficits)
 - d. Time of Last Known Well
 - e. Anticoagulation medications (type and when was it last taken)
12. Rapid transport.

EMS STROKE ASSESSMENT TOOL


Spot a stroke—B.E. F.A.S.T.

B



BALANCE
 SUDDEN DIZZINESS,
 LOSS OF BALANCE OR
 COORDINATION

E



EYES
 SUDDEN TROUBLE
 SEEING OUT OF
 ONE OR BOTH EYES

F



FACE
 FACIAL WEAKNESS,
 UNEVEN SMILE

A


ARM
 WEAKNESS, UNABLE
 TO RAISE BOTH ARMS
 EVENLY

S


SPEECH
 IMPAIRED, SLURRED,
 DIFFICULTY REPEATING
 SIMPLE PHRASES

T


TIME
 CALL 911
 IMMEDIATELY

Table 1 Vision, aphasia, neglect emergent large vessel occlusion screening tool


Stroke VAN	
How weak is the patient?	<input type="checkbox"/> Mild (minor drift) <input type="checkbox"/> Moderate (severe drift—touches or nearly touches ground) <input type="checkbox"/> Severe (flaccid or no antigravity) <input type="checkbox"/> Patient shows no weakness. Patient is VAN negative
Raise both arms up	
(exceptions are confused or comatose patients with dizziness, focal findings, or no reason for their altered mental status then basilar artery thrombus must be considered; CTA is warranted)	
Visual disturbance	<input type="checkbox"/> Field cut (which side) (4 quadrants) <input type="checkbox"/> Double vision (ask patient to look to right then left; evaluate for uneven eyes) <input type="checkbox"/> Blind new onset <input type="checkbox"/> None
Aphasia	<input type="checkbox"/> Expressive (inability to speak or paraphasic errors); do not count slurring of words (repeat and name 2 objects) <input type="checkbox"/> Receptive (not understanding or following commands) (close eyes, make fist) <input type="checkbox"/> Mixed <input type="checkbox"/> None
Neglect	<input type="checkbox"/> Forced gaze or inability to track to one side <input type="checkbox"/> Unable to feel both sides at the same time, or unable to identify own arm <input type="checkbox"/> Ignoring one side <input type="checkbox"/> None

Patient must have weakness plus one or all of the V, A, or N to be VAN positive. VAN positive patients had 100% sensitivity, 90% specificity, positive predictive value 74%, and negative predictive value 100% for detecting large vessel occlusion. CTA, CT angiography; VAN, vision, aphasia, and neglect.

If a positive finding is noted for BEFAST assessment, suspect a Stroke. For suspected Stroke patients, complete the following items:

- 1) SROKE VAN assessment (above)
- 2) PASTA patient history (below)

***Neuro-Intervention is available 24/7/365 at SRMC and our providers will be expecting this info to help them determine treatment options for your patient.**



Standardized communication

(PASTA)


Past medical history (HTN, Afib, DM, HLP, CVA, Seizure etc)

Age

Stroke scale/symptoms (BEFAST mainly.. Explain deficit briefly)

Time of last known well (LKW)

Anticoagulation (type and when was last time taken, INR if coumadin)



Note: Per State of Ohio EMS Guidelines

Patients for whom the onset of stroke symptoms can be confirmed within 24 hours or less of the activation of initiation of the emergency response system should be transported directly to a certified stroke center based upon the local resources and stroke system of care. Patients with a suspected LVO based upon the use of a stroke severity tool should be transported to a thrombectomy-capable or comprehensive stroke center if the additional transport time is not more than 15-30 minutes. At a minimum and as a secondary option, the patient with a suspected acute stroke should be transported to a hospital with a functioning CT scanner and emergent radiology services available.

