

EL DORADO COUNTY EMS AGENCY

PREHOSPITAL PROTOCOLS

Effective: July 1, 2015

Reviewed: July, 2017

Revised: March, 2024

(on file)

EMS Agency Medical Director

STROKE

PROTOCOL PROCEDURE: Flow of protocol presumes that condition is continuing. Immediate, rapid transport is preferred with treatment performed en route. Contact Base Hospital for consideration of air ambulance transport for patients in remote areas with long transport times.

Basic Life Support

EMT

ABCs / ROUTINE MEDICAL CARE –

- Assess airway and support ventilation with appropriate airway adjuncts as indicated.
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress

PERFORM PATIENT ASSESSMENT INCLUDING:

- Cincinnati Prehospital Stroke Scale (CPSS). See chart below.
- Glucose Level Assessment - Via finger stick or via venipuncture. Refer to GLYCEMIC EMERGENCY protocol for hypoglycemic treatment.
- Determine time of onset – Last known well time is time the patient was witnessed by another party to have been at their prior baseline.
- Has the patient had recent trauma or surgery?

CPSS

| Symptom | Test | Normal | Abnormal |
|---------------------|---|--|--|
| Facial Droop | Ask patient to show teeth or smile | Both sides of face move equally | One side of face does not move as well as the other |
| Arm Drift | Ask Patient to close eyes and extend both arms out for 10 seconds | Both arms move the same or both do not move at all | One arm does not move or one arm drifts downward compared to the other |
| Speech | Ask the patient to say, "You can't teach an old dog new tricks" | Uses correct words with no slurring | Uses the wrong words, slurs words or is unable to speak |
| Time | In depth assessment to find an accurate as possible "Last known well time" | | |

Suspect Ischemic Stroke for the following:

- New onset symptoms with abnormal CPSS
- New onset altered state with unidentifiable etiology.

Suspect Hemorrhagic Stroke for the following: (Pt may not have ischemic stroke symptoms)

- Sudden onset severe headache, often described as "the worst headache of my life"
- Acute neurologic change AND
 - ALOC/seizures
 - Nausea and/or vomiting
 - Marked hypertension

LOSOP

EMT working under Local Optional Scope

GLUCOSE LEVEL ASSESSMENT – Via finger stick. Consider confirming test results with second glucose check with blood from a different site (and different meter, if available) if patient's presentation doesn't match the test results.

HYPOGLYCEMIA (blood glucose ≤ 60 mg/dL)-

- **Glucose Dose** -15 g PO. Repeat if no response and ALS intervention is unavailable.
- **Consider SGA** if GCS ≤ 8

Advanced Life Support

Paramedic

Patients who show signs and symptoms of stroke must be treated as a time-sensitive emergency and should be transported without delay to the closest institution that provides emergency stroke care. (All EDs that serve as closest receiving facilities for El Dorado County provide emergency stroke care).

- **AIRWAY** – Consider intubation or place SGA for GCS \leq to 8
- **CARDIAC MONITOR** – Consider 12 lead EKG (do not delay transport)
- **ESTABLISH IV/IO** – NS TKO. Twin Cath or a second line is preferred for thrombolytic candidates. Limit IV attempts to two.

CONTACT BASE HOSPITAL –

- Notify of “**STROKE ALERT** “
- Relay **ISCHEMIC/HEMORRHAGIC** specific assessment information and **ETA**.
- Consider lab draw if desired by the receiving facility.