Stroke

Cincinnati Stroke Scale

- Facial Droop
- Arm Drift
- Speech Deficit

VAN Assessment

Weakness + one of the following:

- <u>V</u>isual Disturbance: field cut, double vision, new blindness
- Aphasia: inability to speak or understand
- Neglect: forced gaze, ignoring one side, unable to feel on both sides at the same time

Routine Medical Care

Look for signs of trauma¹

Supplemental **Oxygen** to keep SpO₂ ≥ 93%

Assess blood glucose if CBG < 60 mg/dL

Dextrose 50% 12.5g IV (25ml)

or

Dextrose 10% 12.5g IV (125ml)

(per Diabetic Emergency protocol)

All new onset neurological complaints consistent with stroke should be treated by EMS as a "Stroke Activation"

IV thrombolytic and/or mechanical clot retrieval may be indicated for patients with large vessel occlusion (i.e. VAN+)

Decisions about a patient's eligibility for treatment will be made at the receiving facility based on history, exam, and radiologic findings.

Critically ill patients with compromise of airway, breathing, or circulation may be transported to the closest ED

 Assess initial neurological function using the Cincinnati Stroke Scale exam.

Do NOT treat Hypertension

 Determine when "Last Seen Normal"² and document specific time (e.g. "LSN 13:30" not "1 hour ago")

Assess for Large Vessel Occlusion stroke

(LVO) using the VAN Assessment

If > 15 min transport

additional transport time

Quick & efficient transport is critical. When able, also transport a family member or friend who has pertinent medical information

VAN positive and LSN \leq 24 hours^{2,3}

to reach CSC, TSC, or EC-PSC then transport to it

RESPONSE

NETWORK

If < 15 minutes of additional transport time

decreased LOC, Elevate the head of the stretcher 30°

Receiving ED <u>MUST</u> be contacted as early as possible for prehospital "**Stroke Activation**" - notify hospital of LSN time

Position patient supine for transport. If aspiration risk or

or VAN negative

VAN positive & LSN > 24 hours^{2,3}

Transport to closest appropriate facility that is <u>not</u> a Bypass Hospital

Reference LERN
Protocols /
Guidelines for
further
clarifications

If patient has associated trauma and GCS ≤ 13, treat per *Head Injury* trauma protocol and consider transport to a Trauma Center - ABCs before D

² Last seen normal (LSN) is the time the patient reports being in normal state. If patient is unable to provide history, LSN is last seen in a normal state as stated by a bystander. If patient was awake at the time of symptoms onset or the acute deficit was witnessed, last normal = time of stroke onset (TSO).

³ Patients with an unclear time of onset, i.e. "Wake-Up" strokes, should be treated with the same urgency as those with a clear TSO. Some patients will have MRIs showing they are eligible to receive emergent treatment - IV thrombolytic +/- mechanical clot removal (i.e. thrombectomy).

⁴ CSC = Comprehensive Stroke Center (fka Level 1). TSC = Thrombectomy Stroke Center (new designation). PSC = Primary Stroke Center (fka Level 2). EC = Endovascular Capable (i.e. thrombectomy able). Traffic delays should be considered when factoring in time of transport.

• Consideration for stroke mimics (e.g. hypoglycemia, seizure, sepsis, migraine, intoxication) should not change a provider's choice in hospital destination. Transport based on the most immediate life-threatening or disabling condition... that will usually be the stroke.