The Cincinnati Prehospital Stroke Scale

Facial Droop
(have patient show teeth or smile)

- NORMAL
  - Both sides of face move equally.
- ABNORMAL
  - One side of face does not move as well as the other side.

Arm Drift
(patient closes eyes and extends both arms straight out, with palms up for 10 seconds)

- NORMAL
  - Both arms move the same or both arms do not move at all.
- ABNORMAL
  - One arm does not move or one arm drifts down compared with the other.

Abnormal Speech
(have the patient say “you can’t teach an old dog new tricks”)

- Normal - Patient uses correct words with no slurring.
- Abnormal - Patient slurs words, uses the wrong words, or is unable to speak.

If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%
Suspected Stroke Algorithm: Goals for Management of Stroke

**Identify Signs and Symptoms of Possible Stroke**

**Active Emergency Response**

**Critical EMS assessments and actions**

- **Immediate general assessment and stabilization**
  - Assess ABCs, vital signs
  - Provide oxygen if O₂ sat <94%
  - Obtain IV access and perform laboratory assessments
  - Check glucose; treat if indicated
  - Obtain 12-lead ECG
  - Perform neurologic screening assessment
  - Order emergent CT without contrast

- **Immediate neurologic assessment by stroke team or designee**
  - Review patient history
  - Establish time of symptom onset or last known normal
  - Perform neurologic examination (NIH Stroke Scale or Canadian Neurological Scale)

**Does CT Scan Show Hemorrhage?**

- **No hemorrhage**
  - Probably acute ischemic stroke; consider fibrinolytic therapy
  - Check fibrinolytic exclusions
  - Repeat neurologic exam: are deficits rapidly improving to normal?

  - **Patient remains candidate for fibrinolytic therapy?**
    - **Candidate**
      - Review risks/benefits with patient & family.
      - If acceptable:
        - Give rTPA**
        - No anticoagulants or antiplatelet treatment for 24 hours

      - **Begin post-rTPA stroke pathway**
      - Aggressively monitor:
        - BP per protocol
        - For neurologic deterioration
        - Emergent admission to stroke unit or intensive care unit

  - **Not a candidate**
    - **Administer aspirin**

- **Hemorrhage**
  - Consult neurologist or neurosurgeon; consider transfer if not available.

  - **Begin stroke or hemorrhage pathway**
  - Admit to stroke unit or intensive care unit


If onset >3 hours consider triage to hospital with interventional capabilities for stroke.