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 hypoxic
- Obtain IV access and perform laboratory assessments
- Check glucose; treat if indicated
- Obtain 12-lead ECG
- Perform neurologic screening assessment
- Order emergent CT brain without contrast or MRI scan

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)

Immediate neurologic assessment by stroke team or designee

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?
- Hemorrhage
  - Consult neurologist or neurosurgeon; consider transfer if not available.
  - Begin stroke or hemorrhage pathway
  - Admit to stroke unit or intensive care unit

Patient remains candidate for fibrinolytic therapy?
- Candidate*
  - Review risks/benefits with patient & family.
  - If acceptable:
    - Give tPA**
    - No anticoagulants or antiplatelet treatment for 24 hours
- Not a candidate
  - Consider EVT transfer within 60 minutes
