

Clinical Scenario:

Stroke, Ischemic (CVA)

Scenario:

50, female c/o new onset left facial droop, numbness around her mouth, blurry vision and headache X 2 days. States felt unsteady when walking at home. AAOx3.

Initial VS: T 37 HR 70, RR 19, BP 133/80

Denies:

- Any other neurological deficit
- No sudden onset/thunderclap h/a
- Speech/ swallowing changes
- Trauma
- Any anticoagulation medications

ED Course: Tylenol PO

At Time of Decision:

- Blurry vision / headache improved
- + left facial droop
- Motor strength Left 4, Right 5
- Patient assisted to bathroom, very unsteady on feet, leans to left
- NIH Score 3

Medical History: obesity, HTN, IDDM

Vital Signs: HR 68, RR 18, BP 156/80

Labs: WNL

Imaging: CT/CTA neg, MRI ordered

INPATIENT

- Inpatient care indicated, one:
 - Acute ischemic with findings*, one:
 - NIHSS > 2
 - Evidence of hemorrhage
 - AMS*
 - INPT PT/OT treatment/eval warranted
 - Dysphagia
 - Significant extremity weakness
 - Aphasia
 - Gait impairment
 - + brain imaging (mass, edema)
 - unclear (recurrent/worsening)
 - Acute Ischemic CVA, + INPT care, one:
 - Unstable vs
 - Concerning cardiac arrhythmia
 - Respiratory abnormality
 - Severe hypertension
 - Extended telemetry > 24 hrs needed
 - Suspected vasculitis
 - Pregnancy
 - Thrombolysis (plan or performed)
 - Urgent INPT procedure planned

*Can NOT be patient baseline

OBSERVATION

- Observation care indicated, one:
 - Vital sign abnormality**
 - Appropriate evaluation (brain MRI, echocardiogram, carotid imaging) cannot be completed in emergency department time frame (3 to 4 hours).
 - Cardiac embolic source suspected requiring cardiac telemetry monitoring beyond emergency department care time frame
 - National Institutes of Health Stroke Scale (NIHSS) score less than or equal to 2 and monitoring of neurologic findings (eg, for worsening or recurrence of findings) beyond emergency department time frame (3 to 4 hours) is needed

** Can NOT be patient baseline

Recommended Workflow

- C-** Consider appropriate care setting
 - Hospitalization
- A-** Ask what the principal diagnosis is?
 - CVA/Stroke
- R-** Review INPT guideline first, then OBS
 - INPT criteria: MET
- E-** Enter bed status / level of care order
 - Inpatient
- D-** Document criteria in medical record

Teaching Points:

- CVA = persistent deficit- therefore left arm weakness, and gait impairment and NIH score = 3
- Admission status is always based on provider judgement but with supportive documentation towards status
- NIHSS score >2 supports INPT CVA Criteria selection
- NIHSS score ≤2 supports OBS CVA Criteria selection
- Documentation of criteria points, NIHSS score, abnormal VS, helps support admission status selection
- Contraindication of medications needs to be documented