

ED OBSERVATION UNIT: NEUROLOGY STROKE TIA PROTOCOL NYC H+H KINGS COUNTY HOSPITAL CENTER

General Observation Guidelines apply for all ED observation patients

Please Note: These patients will be observed under the ED team and the Neurology service will guide management as consultants. The ED team will follow standard documentation procedures as outlined in the SOP.

The Neurology Stroke service will:

1. Clearly outline the management plan before the patient is accepted to the OBS unit
2. Remain on the case as consultants throughout the entire observation stay
3. Document clearance to discharge upon treatment completion

| INCLUSION CRITERIA | EXCLUSION CRITERIA |
|---|--|
| <ul style="list-style-type: none"> ● Patients with no new focal neurological deficits ● Stable Vital Signs including normal Serum Glucose ● Non-Contrast CT Head displays no evidence of acute findings (ICH, Acute Infarct, Mass, etc.) | <ul style="list-style-type: none"> ● Debilitated status: <ul style="list-style-type: none"> ○ Pre morbid mRS \geq 3 ● High risk of recurrence: <ul style="list-style-type: none"> ○ ABCD2 score \geq 6 ○ Vascular lesion found on CTA head and neck with contrast ○ Acute abnormal EKG ○ Unstable Vital Signs ○ Known hypercoagulable disease ● Risk of Embolic Disease: <ul style="list-style-type: none"> ○ Newly found AFIB ○ Mechanical Heart Valves |

| INTERVENTIONS |
|---|
| <ul style="list-style-type: none"> ● Management to be outlined by Neurology team prior to placing patient on OBS status ● Reinitiating of home antihypertensive and diabetes medication ● Labs: HgA1C, lipid panel* ● MRI Head/Brain without contrast <ul style="list-style-type: none"> ○ Safety sheet to be performed by primary team ● Telemetry Monitoring ● Q4 hour neuro checks / vital signs, performed by RN staff ● 1 dedicated ED-Obs bed is reserved for TIA pathway. If ED-Obs is full, escalation to director of ED-Obs is indicated. |

ED OBSERVATION UNIT: NEUROLOGY STROKE TIA PROTOCOL NYC H+H KINGS COUNTY HOSPITAL CENTER

DISPOSITION

Home:

- Stable vital signs (SBP<160mmHg)
- Neurological status returned to baseline
- Documented Clearance by Neurology Stroke Service
- E-consult Stroke Clinic upon discharge
- Discharge medication: antiplatelet, statin therapy*
- Documentation of discharge mRS*

Admission:

- Evidence of Acute ischemic stroke on MRI
- Worsening neurological symptoms
- Unstable Vital Signs despite treatment within 24 hours
- Newly found Arrhythmia on telemetry monitoring
- Unable to ambulate
- Unsafe discharge

*American Heart Association Get With the Guidelines and Joint Commission requirement.

Sources

Johnston SC, Rothwell PM, Nguyen-Huynh MN, Giles MF, Elkins JS, Bernstein AL, Sidney S. Validation and refinement of scores to predict very early stroke risk after transient ischaemic attack. *Lancet*. 2007 Jan 27;369(9558):283-92. doi: 10.1016/S0140-6736(07)60150-0. PMID: 17258668.

Josephson SA, Sidney S, Pham TN, Bernstein AL, Johnston SC. Higher ABCD2 score predicts patients most likely to have true transient ischemic attack. *Stroke*. 2008 Nov;39(11):3096-8. doi: 10.1161/STROKEAHA.108.514562. Epub 2008 Aug 7. PMID: 18688003.

ED OBSERVATION UNIT: NEUROLOGY STROKE TIA PROTOCOL NYC H+H KINGS COUNTY HOSPITAL CENTER

ABCD² Score for TIA

| Criteria | Value | Points |
|------------------------------|-------------------------------------|--------|
| Age ≥ 60 years | Y/N | +1 |
| BP ≥ 140/90 mmHg | Y/N | +1 |
| Clinical features of the TIA | Unilateral Weakness | +2 |
| | Speech disturbance without weakness | +1 |
| | Other symptoms | 0 |
| Duration of symptoms | < 10 minutes | 0 |
| | 10-59 minutes | +1 |
| | ≥ 60 minutes | +2 |
| History of diabetes | Y/N | +1 |

0 points

Per the validation study, 0-3 points: Low Risk
 2-Day Stroke Risk: 1.0%
 7-Day Stroke Risk: 1.2%
 90-Day Stroke Risk: 3.1%

4 points

Per the validation study, 4-5 points: Moderate Risk
 2-Day Stroke Risk: 4.1%
 7-Day Stroke Risk: 5.9%
 90-Day Stroke Risk: 9.8%

6 points

Per the validation study, 6-7 points: High Risk
 2-Day Stroke Risk: 8.1%
 7-Day Stroke Risk: 11.7%
 90-Day Stroke Risk: 17.8%