

SUSPECTED ACUTE STROKE PATHWAY

- Inclusion Criteria**
- Children ≥ 1 month (corrected age)
- Exclusions Criteria**
- Children <1 month of age

- Outside admissions/transfers to CHMC for suspected stroke**
- Call physicians priority line
 - Call Communication Center to page on-call neurologist

If tPA is indicated, administration is recommended within 3 hours

- Acute Stroke Risk Factors**
- Sickle cell disease
 - Congenital or acquired heart disease
 - Head & neck infections
 - Systemic conditions such as inflammatory bowel disease & autoimmune disorders
 - Head trauma

- *Imaging Notes**
- Stroke Panel MR Stroke Brain WO Contrast and MRA Head WO Contrast is preferred as first line imaging in suspected acute stroke
 - If MRI will not be available within 1 HOUR of stroke activation, patient has contraindication to MRI, or patient would need sedation, then a CT Head WO Contrast should be ordered STAT
 - Additional imaging such as neck MRA or CTA head or neck may be needed pending results of initial imaging study and will be decided on a case-by-case basis

Patient presents with signs and symptoms of acute stroke:

- Focal neurologic deficits
- Sudden unexplained change in mental status

Did symptoms start <24 hours ago?

Manage off pathway
Consult Neurology

Are symptoms completely resolved?

Follow **Transient Ischemic Attack (TIA)** guidelines

- Consult neurologist on call
- Neuro checks every 2 hours for 3 hours, then every 4 hours for 24 hours

Assess for **Acute Stroke Risk Factors**

- Call Communication Center (402-955-6911) to activate the **Stroke Team** - page includes MRI, pharmacist, and on-call neurologist
- Vital signs & neuro checks every 15 minutes for 3 hours
- Complete **Pediatric NIH Stroke Scale (NIHSS)** on first neuro assessment

Use Suspected Acute Stroke Pathway order set:

- Stroke Panel – MR Stroke Brain WO Contrast and MRA Head WO Contrast – STAT*
see imaging notes
 - IV access NOT needed prior to MRI
 - Radiologist to read scan and call report to ordering provider then document in EMR using .strokeimgrsults

Order Stroke Panel – MR Stroke Brain WO Contrast and MRA Head WO Contrast - STAT include "TIA" on the order indication

Do not delay imaging for the following, obtain ASAP:

- Labs
 - PT, PTT, ESR, CRP, CMP, CBC
 - Serum pregnancy test, in post-menarchal females
 - EPOC panel, if clinically indicated
- 12-lead ECG

Additional Instructions

- Establish intravascular access (if not already in place)
- Head of bed flat
- Keep normo-thermic, normoglycemic, and blood pressure within normal limits for age
- Keep NPO
- Ensure nursing documentation of weight in Kg
- Provider documentation of time patient was last seen normal (if not already documented)
- If giving fluid, administer normal saline (**DO NOT give dextrose**)
- Review **tissue plasminogen activator (tPA)** contraindications & eligibility for endovascular therapy while waiting for imaging results

Was an intracranial hemorrhage present?

Was an ischemic stroke present?

For TIA

- Admit to Med/surg
- Start aspirin immediately 5mg/kg (max 81mg) every 24h
- Monitor clinically

Manage as Hemorrhagic Stroke

- Consult Neurosurgery

Manage as Ischemic Stroke

- tPA treatment protocol, if eligible
- Start aspirin 5 mg/kg (max 81 mg) every 24hr
 - Immediately if tPA protocol not activated
 - 24-48 hr after stroke onset if tPA given

Admit to PICU/CICU
**Congenital cardiac patients go to CICU*