



# Portage County EMS Patient Care Guidelines



## Stroke

### Notes:

- Identify family or friend who may assist with history and decision making, get contact info and strongly encourage them to come to ED as they may be needed for consent for treatment.
- Be cautious of conditions that mimic stroke: hypoglycemia, post-ictal paralysis, complex migraine, overdose, trauma, Bell's palsy
- Identification of patients that may be candidates for fibrinolytics is a priority but patients outside of that time window may still be candidates for other time-sensitive interventions.
- Stroke is not a condition limited to the aged. Consider stroke in younger patients and pediatric patients presenting with stroke symptoms.

Priorities	Assessment Findings
Chief Complaint	"Weakness", "Confusion", "Slurred Speech", "Unresponsive"
LOPQRST	<b>When was the patient last seen normal? (Date/specific time)</b>
AS/PN	Headache, weakness, pupil dilation, slurred speech, aphasia, incontinent, limb numbness, paralysis of the face, arm, or leg on one side of the body, sudden trouble seeing, loss of balance Seizure activity with or since stroke symptom onset
AMPL	Medication consistent with history of cardiovascular disease. Risk factors for cardiovascular disease.
Initial Exam	ABC's and correct any immediate life threats
Detailed Focused Exam	<b>Vital signs:</b> BP, HR, RR, Temp, SpO2 <b>General Appearance:</b> Unresponsive, noticeable facial droop, drooling, slouched posture <b>Neuro:</b> Cincinnati pre-hospital stroke scale (speech, facial symmetry, motor)[3], Glasgow Coma Scale
Data	Blood glucose
Goals of Therapy	Maintain ABC's and adequate vital signs, rapid transport to definitive care
Monitoring	Cardiac rhythm Vital signs, SpO <sub>2</sub>

### EMERGENCY MEDICAL RESPONDER/ EMERGENCY MEDICAL TECHNICIAN

- Routine Medical Care
- Administer oxygen 2 – 4 LPM per nasal cannula if SpO<sub>2</sub> < 94%. Increase flow and consider non-rebreather mask to keep SpO<sub>2</sub> > 94%
- Check blood glucose. See *Altered Level of Consciousness Guidelines*. (Non-oral route is preferred for glucose administration if needed.)
- Do not allow the patient to eat or drink anything (Keep NPO)

*Give a status report to the ambulance crew by radio ASAP.*

### ADVANCED EMERGENCY MEDICAL TECHNICIAN

- IV normal saline @ KVO
  - Consider establishing a second IV but do not delay transport

*Contact Medical Control for the following:*

- Additional IV fluid orders

## **INTERMEDIATE**

- Acquire, interpret and transmit a 12-lead EKG to receiving facility.
- Consider intubation if unresponsive without gag reflex
- Complete fibrinolytic screening[1]
- Minimize scene time and initiate rapid transport to closest hospital with 24/7 CT scan and t-PA availability if the onset of signs/symptoms was less than 24 hours ago.
- Transport the patient as flat as possible but consider elevating head of bed 25 – 30 degrees if aspiration or other airway issues are a concern.
- Notify receiving facility of stable patients with persistent deficits that may be taken directly to CT
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*Contact Medical Control for the following:*

- Severe hypertension (generally not treated unless > 220/110)

## **PARAMEDIC**

- Consider RSI/RSA[2]

### **FOOTNOTES:**

[1] Fibrinolytic screening:

- Active bleeding within 10 days (to include GI)
- Surgery or trauma in the last 14 days
- CVA/stroke/other neurological symptoms
- New onset altered mental status.
- History of arteriovenous malformation (AVM)
- History of aneurysm
- Allergy to heparin
- Pregnancy
- Severe hypertension (Systolic > 180 or diastolic > 110)
- Sharp or tearing chest pain that radiates to the shoulder blades (suspected aortic dissection)
- History of CVA, arteriovenous malformation (AVM), cerebral aneurysm
- Allergy to fibrinolytics
- Prior treatment from a fibrinolytic? If so, which one?

[2] RSI/RSA requires 2 paramedics at the patient's side

[3] Cincinnati Prehospital Stroke Scale

- Have the patient smile note any facial droop.
- Have the patient extend both arms in front of them and not any arm “drift.”
- Have the patient say the following statement “You can’t teach an old dog new tricks” and note any difficulty speaking.

- Ask family or caregiver if any abnormality is new

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