

# CVA/TIA

## Protocol

Douglas County KS EMS System

November 2022

### **Reference Procedures:** [Blood Glucose](#)

### **Goals of Patient Care**

- Rapid evaluation of the neurologically impaired patient
- Recognition of acute stroke (ischemic and hemorrhagic) as etiology

### **Medications**

#### ADULT Medications:

- **[Nitroglycerin:](#)**
  - 0.4mg SL repeat q 3-5 min (Systolic BP above 100mm Hg) (max dose, 3 sprays)
  - Paste 0.5-1.0 inch. Transdermal

#### PEDIATRIC Medications:

☎ Contact Medical Control

### **Procedures/Interventions**

If patient has neurological changes or new onset of stroke-like symptoms perform Cincinnati Pre-hospital Stroke Scale (CPSS)

Obtain last known normal time (LKNT) – the time the patient was last observed at their cognitive and motor baseline. Note duration of symptoms (if resolved).

Ascertain if patient is blood thinners (apixaban, warfarin, etc.) or antiplatelet agents (aspirin, Plavix, etc.)

Check blood sugar via glucometer. If blood glucoses is <60 refer to diabetic emergency protocol

If onset of stroke like symptoms or failed CPSS and patient has a normal blood sugar, notify receiving facility of "CVA ALERT"

1. Administer oxygen and assist ventilation as required
2. Establish IV access
3. Consider other causes of altered mental status, such as hypoxia, hypoperfusion, trauma or overdose
4. If no spinal injury transport with head elevated to 35 degrees to promote cerebral drainage
5. If patient develops seizures, refer to seizure protocol
6. Consider hypertensive crisis if systolic BP > 180 or diastolic BP >110mmHg with associated symptoms. If blood pressure is at this threshold or higher, consider administration of nitroglycerin but the goal should be no more than 20% reduction in blood pressure.

# CVA/TIA

## Protocol

Douglas County KS EMS System

November 2022

7. Watch for signs of intracranial pressure (seen more in hemorrhagic strokes):
  - Increase systolic BP
  - Widen pulse pressure
  - Bradycardia (may also see deep T wave inversions laterally)
  - Abnormal respiratory pattern
8. DO NOT SIGNIFICANTLY LOWER BLOOD PRESSURE BEYOND GOALS IF ISCHEMIC CVA IS SUSPECTED (may be indicated in patients with hemorrhagic stroke – contact medical control)

### **Considerations**

Considerations for crews on scene prior to ambulance arrival

- Obtain last known normal time (LKNT) – the time the patient was last observed at their cognitive and motor baseline. Note duration of symptoms (if resolved).
- If patient has neurological changes or new onset of stroke-like symptoms perform Cincinnati Pre-hospital Stroke Scale (CPSS)
- Check blood sugar via glucometer.
- Consider other causes of altered mental status, such as hypoxia, hypoperfusion, trauma or overdose