

## CVA (Stroke)

### CVA Cerebral Vascular Accident (Stroke)

<u>30 Second Review</u>	<u>CVA (Cerebrovascular Accident)</u>
<b>RN, LPN</b>	
Def: Neurologic abnormalities caused by ischemia of brain tissue	
S/S: Motor and/or sensory neurologic deficit, convulsions or coma	
RX: 1) Monitor Airway, Breathing, Circulation, and Level of consciousness	
2) O2 4-8 L by cannula or mask if breathing comfortably. If labored breathing, or not fully conscious, use ambu bag.	
3) Transport to hospital	
4) While waiting for transport, may start IV access TKO, and call provider.	
5) If symptoms seem resolved, call Provider for advice.	

**SKILL LEVEL:** RN, LPN

**DEFINITION:** Cerebral vessels are occluded by an embolus or cerebrovascular hemorrhage, resulting in ischemia of the brain, and thus neurologic abnormalities. Neurologic symptoms may be permanent or of short duration.

**DATA BASE:**

**Subjective:** Symptoms and complaints will vary dependent upon the area of brain involved and the type of stroke.

**Objective:**

1. Document onset, duration, activity contributing or associated factors, sensorium, neck rigidity, location of cerebral deficit convulsions.
2. Vital Signs, current meds, other illnesses (Diabetes, Hypertension, Heart Disease).
3. Assess Neurological status as much as possible (see also attached nursing education)
  - Facial Motor and/or Sensory Deficits
  - Upper extremity Motor-Sensory Deficits
  - Lower extremity Motor-Sensory Deficits
  - Speech garbled or clear
  - Vision may be impaired
  - Gait and Balance—patient may be unable to walk
  - Gross and Fine motor coordination impaired

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- Sensorium (i. e. consciousness and mental awareness)
- Memory
- Autonomic (unstable vital signs)

**Isolated facial asymmetry without any other neurological findings (patient fully conscious with no other weakness or abnormality), consider contacting the medical provider for further advice.**

**Plan:** If evaluation reveals that a stroke is likely to be occurring, time is critical! TPA (clot buster) is shown to have the best efficacy if given within 3 hours of the initial onset of the neurologic deficit.

1. Monitor ABC.
2. Ongoing neurological assessment, looking for changes.
3. a) O<sub>2</sub> at 4-6 L by nasal prongs if breathing comfortably.  
If labored breathing, or not fully conscious, use ambu bag or non-rebreather bag at high flow.  
b) Start IV "To keep open" for meds if needed.  
c) Transport emergently to ER.
4. Some patients may have symptoms that seem to resolve completely spontaneously. Call medical provider if this happens. Patient transport may still be medically indicated. Always schedule a provider follow-up at the next available time.
4. While waiting for transport, may contact medical provider to advise of the situation.
5. When patient returns from ER assure standard evaluation was completed. This standard evaluation includes either CT Scan or MRI, EKG, glucose evaluation. All results of the above tests should return with the patient.  
a) If ischemic thrombosis, patient may have received TPA (anti-clot therapy).  
b) If hemorrhagic bleeding exists, patient needs surgical intervention.
6. If patient returns, evaluate immediately on return and again after two hours. If unexpected progressive deterioration, return patient to the ER. If patient returns and is stable, schedule with medical provider the next available time.

## Nursing Education:

1. Differential Diagnosis:
  - a. Stroke or TIA
  - b. Seizures
  - c. Hypoglycemia
  - d. Bell's Palsy (the only neurologic deficit is unilateral facial droop causing eyelid weakness, or abnormal smile—"facial droop").
  - e. Drug ingestion or overdose

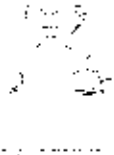
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2. If a stroke is occurring time is critical! TPA (clot buster) is shown to have the best efficacy if given within 3 hours of the initial onset of the neurologic deficit.
3. The ER evaluation might include CT scan, metabolic panel, and lumbar puncture.



### Facial Droop

- *Normal:* Both sides of face move equally
- *Abnormal:* One side of face does not move at all
- *If this is an isolated finding with no other neurological abnormality, this is likely Bell's Palsy—a benign condition, not a stroke.*



### Arm Drift

- *Normal:* Both arms move equally or not at all
- *Abnormal:* One arm drifts compared to the other

### Speech

- *Normal:* Patient uses correct words with no slurring
- *Abnormal:* Slurred or inappropriate words or mute


### APPROVED:

\_\_\_\_\_  
Health Services Manager

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chief Medical Officer

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Medical Director

4/9/09  
\_\_\_\_\_  
Date

Effective Date: May 2009

Revised: February 2009

## CVA (Stroke)

This evaluation form may be helpful for the transport staff and for documentation purposes. Consider copying the form and entering the information while awaiting emergency transport.

### Los Angeles Prehospital Stroke Screen (LAPSS)

Screening Criteria	Yes	No
1. Age over 45 years	___	___
2. No prior history of seizure disorder	___	___
3. New onset of neurologic symptoms in last 24 hours	___	___
4. Patient was ambulatory at baseline (prior to event)	___	___
5. Blood glucose between 60 and 400	___	___

#### Exam: look for obvious assymetry

	Normal	Right	Left
Facial smile / grimace:	___	___ Droop	___ Droop
Grip:	___	___ Weak Grip	___ Weak Grip
		___ No Grip	___ No Grip
Arm weakness:	___	___ Drifts Down	___ Drifts Down
		___ Falls Rapidly	___ Falls Rapidly

	Yes	No
6. Based on exam, patient has only unilateral weakness:	___	___

#### If Yes (or unknown) to all items above LAPSS screening criteria met:

If LAPSS criteria for stroke met, call receiving hospital with "code stroke", if not then return to the appropriate treatment protocol. (Note: the patient may still be experiencing a stroke if even if all LAPSS criteria are not met.)