# CVA Cerebral Vascular Accident (Stroke)

<table>
<thead>
<tr>
<th>30 Second Review</th>
<th>CVA (Cerebrovascular Accident)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN, LPN</td>
<td></td>
</tr>
<tr>
<td><strong>Def:</strong> Neurologic abnormalities caused by ischemia of brain tissue</td>
<td><strong>RN, LPN</strong></td>
</tr>
<tr>
<td><strong>S/S:</strong> Motor and/or sensory neurologic deficit, convulsions or coma</td>
<td><strong>DEFINITION:</strong> 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.</td>
</tr>
<tr>
<td><strong>RX:</strong> 1) Monitor Airway, Breathing, Circulation, and Level of consciousness</td>
<td><strong>DATA BASE:</strong></td>
</tr>
<tr>
<td>2) 02 4-8 L by cannula or mask if breathing comfortably. If labored breathing, or not fully conscious, use ambu bag.</td>
<td><strong>Subjective:</strong> Symptoms and complaints will vary dependent upon the area of brain involved and the type of stroke.</td>
</tr>
<tr>
<td>3) Transport to hospital</td>
<td><strong>Objective:</strong></td>
</tr>
<tr>
<td>4) While waiting for transport, may start IV access TKO, and call provider.</td>
<td>1. Document onset, duration, activity contributing or associated factors, sensorium, neck rigidity, location of cerebral deficit convulsions.</td>
</tr>
<tr>
<td></td>
<td>2. Vital Signs, current meds, other illnesses (Diabetes, Hypertension, Heart Disease).</td>
</tr>
<tr>
<td></td>
<td>3. Assess Neurological status as much as possible (see also attached nursing education)</td>
</tr>
<tr>
<td></td>
<td>- Facial Motor and/or Sensory Deficits</td>
</tr>
<tr>
<td></td>
<td>- Upper extremity Motor-Sensory Deficits</td>
</tr>
<tr>
<td></td>
<td>- Lower extremity Motor-Sensory Deficits</td>
</tr>
<tr>
<td></td>
<td>- Speech clear, garbled, slurred, or inappropriate</td>
</tr>
<tr>
<td></td>
<td>- Vision may be impaired</td>
</tr>
<tr>
<td></td>
<td>- Gait and Balance—patient may be unable to walk</td>
</tr>
<tr>
<td></td>
<td>- Gross and Fine motor coordination impaired</td>
</tr>
</tbody>
</table>

Page 1 of 5
- Sensorium/mental status may be impaired or normal
- Memory, especially short term, may be impaired
- Autonomic instability (unstable vital signs) is not common but may be present.

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. This may be a case of Bell's Palsy.

**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, observe for changes in patient's condition.

3. a) 02 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 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.

5. While waiting for transport, may contact medical provider to advise of the situation.

6. If patient returns from ER without admittance, 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. Call provider if questions about evaluation.

7. If patient returns, evaluate immediately on return and again after two hours. If there is unexpected 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

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:

Medical Services Manager

Date

Chief Medical Officer

Date

Medical Director

Signature: Steven Sharon, M.D.

Date: 2/24/2015

Effective Date: 3/2015
Revised: February 2015
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**

1. Age over 45 years  
   - Yes  
   - No
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 asymmetry**

<table>
<thead>
<tr>
<th>Normal</th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facial smile / grimace:</td>
<td>___</td>
<td>___ Droop</td>
</tr>
<tr>
<td>Grip:</td>
<td>___ Weak Grip</td>
<td>___ Weak Grip</td>
</tr>
<tr>
<td></td>
<td>___ No Grip</td>
<td>___ No Grip</td>
</tr>
<tr>
<td>Arm weakness:</td>
<td>___ Drifts Down</td>
<td>___ Drifts Down</td>
</tr>
<tr>
<td></td>
<td>___ Falls Rapidly</td>
<td>___ Falls Rapidly</td>
</tr>
</tbody>
</table>

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

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.)