NJ Department of Health and Senior Services
Office of Emergency Medical Services
Prehospital Stroke Guidelines

Purpose/Background:
According to the American Stroke Association, a division of the American Heart Association, Strokes are a leading cause of death and disability. Approximately 700,000 people suffer a new or recurrent stroke each year. It is imperative that Emergency Medical Service Systems (EMSS) be involved in the education, recognition, assessment and treatment of Strokes. These guidelines have been developed for prehospital providers including Basic Life Support (BLS) and Advanced Life Support (ALS) providers and apply to the care of all patients with possible stroke and TIA symptoms.

Procedure:

1. Initiate general patient care
2. Recognize possible Stroke or TIA symptoms.
    a. Perform Prehospital Stroke Scale or Screen.
    b. The Cincinnati Stroke Scale is the most common and simplest test to perform in the field. The LA Prehospital Stroke Scale may be performed if the provider is knowledgeable using this tool
3. Administer Oxygen.
4. Place patient in position of comfort.
5. Determine time of onset, defined as last time seen or spoken to in normal state.
6. Patients with acute stroke symptoms should be transported to a Designated Stroke Center with notification to the receiving facility.
7. If not simultaneously dispatched, a MICU should be requested but transport should not be delayed waiting for their arrival.
8. If possible, obtain the name of a witness and their cell phone number and a contact person and cell phone number and provide to the receiving facility.
9. If time permits, during transport, complete the optional Stroke Checklist.
10. If the patient is unstable (respiratory or hemodynamically) and is accompanied by BLS only, then the patient is to be transported to the closest appropriate hospital regardless of stroke center status.

Advanced Life Support Treatment Procedure

1. Initiate Intravenous Access without delaying transport.
2. Perform Blood Glucose Level Check
3. Obtain 12 lead ECG without delaying transport.
4. Obtain On Line Medical Command
5. Do Not treat Hypertension in the field.

STROKE TREATMENTS ARE TIME SENSITIVE

- **Prehospital Notification to the receiving hospital with time of symptom onset and stroke scale results reported is a priority.**

SAMPLE STROKE SCREENING TOOL
ACT F.A.S.T.

Cincinnati Prehospital Stroke Scale (CPSS)

Any abnormal finding or old deficits make the scale positive.

Unconscious/unresponsive patients are considered a "non-conclusive" stroke scale.

Facial Droop:
□Normal = Both sides of face move equally
□Abnormal = One side of face does not move at all

Arm Drift: ***Eyes closed, arms extended with palms up for 10 seconds***
□Normal = Both arms move equally or not at all
□Abnormal = One arm drifts compared to the other

Speech: Have the patient say "you can't teach an old dog new tricks"
□Normal = Patient uses correct words with no slurring
□Abnormal = Slurred or inappropriate words or mute

TIME: If Stroke screening criteria for stroke is met, call the receiving hospital with "stroke alert", and transport, if not, return to the appropriate treatment protocol.

- Patient may still be experiencing a stroke even if stroke criteria are not met.

Prehospital Stroke Checklist (Optional)

This checklist is an assessment tool to help hospital personnel determine treatment options. The information should be given to the ER staff at the point of patient transfer of care. It should only be completed if time permits during transport.

☐ 18 years of age or older
☐ Signs/Symptoms of stroke with neurologic deficit (abnormal CSS)
☐ Patient can be delivered to a Stroke Center within 12 hours of symptom onset.

Contraindications (for t-PA)

☐ Active Internal Bleeding within last 21 days (eg., GI or urinary bleeding)
☐ Known bleeding disorder
☐ Patient is on anticoagulants or blood thinners
☐ Intracranial surgery, head trauma or previous stroke within 3 months.
☐ Major surgery or serious trauma within 14 days.
☐ History of intracranial hemorrhage
☐ Witnessed seizure at onset of stroke
☐ History of brain cancer

Complete only if time permits during transport.

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