### CINCINNATI STROKE SCALE

# Objectives

# On completion of the course the student shall be able to:

- Describe the importance of rapid detection CVA/TIA symptoms in the prehospital setting.
- Describe why extensive neurological examinations are inappropriate in the prehospital setting.

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On completion of the course the student shall be able to:

- Describe the three points evaluated in the Cincinnati Stroke Scale evaluation.
- Perform a Cincinnati Stroke Scale evaluation on a victim

# Stroke in The Prehospital Setting

- Stroke must be suspected quickly by EMTs and paramedics in the field.
- In one study EMTs and Paramedics correctly identified stroke and TIA in 72% of the patients with either condition.
- Extensive neurological exams are impractical in the prehospital setting

#### CINCINNATI STROKE SCALE

- Identifies patients with strokes.
- It evaluates three major physical findings.
  - Facial droop
  - Motor arm weakness
  - Speech abnormalities

# Facial Droop

- Have the patient show their teeth or smile.
- Normal both sides of the face move equally well
- Abnormal one side of the face does not move as well as the other side



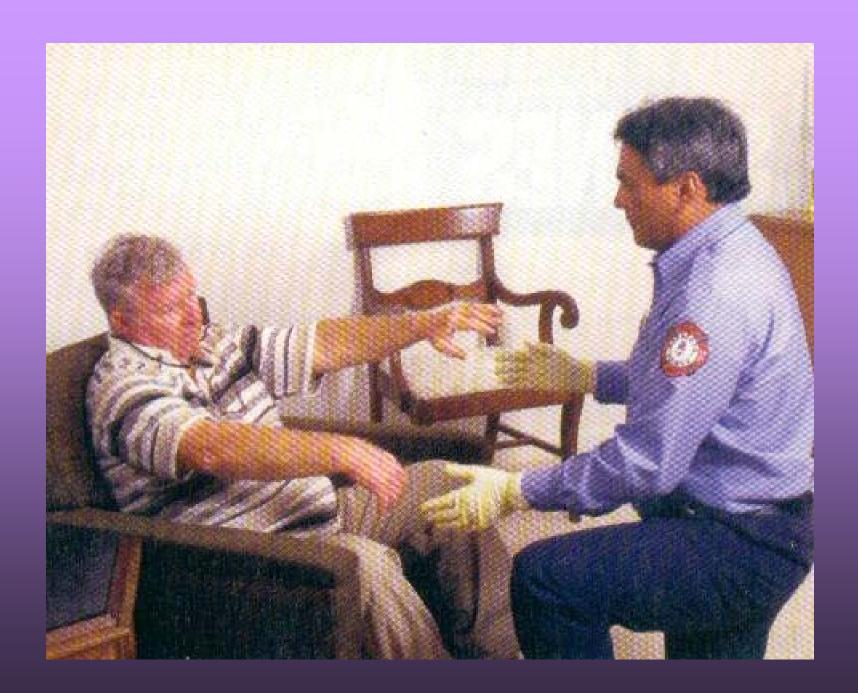


#### Arm Drift

- Have the patient close his/her eyes and hold both arms out.
- Normal both arms move the same way, *or* both arms do not move at all.
- Abnormal one arm does not move *or* one arm drifts down compared to the other arm.

Other findings such as pronater grip, may be helpful





# Speech

- Have the patient say "You can't teach an old dog new tricks."
- Normal patient uses correct words with no slurring.
- Abnormal patient slurs words, uses inappropriate words, *or* is unable to speak



"You can't teach an old dog new tricks."



# Cincinnati Prehospital Stroke Scale

- Patients with 1 of these 3 findings -as a new event have a 72% probability of an ischemic stroke.
- If all 3 findings are present the probability of an acute stroke is more than 85%
- Once the Paramedic has completed an assessment, immediately contact medical control and the destination ED and provide prearrival notification.

#### Stroke

- Once the diagnosis of stroke is suspected, time in the field must be minimized.
- The presence of a patient with acute stroke is a "load and go".
- A more extensive examination or initiation of supportive therapies should be accomplished en route to the hospital.

#### Stroke

- One of the most important aspects of your history must be the time of onset of the symptoms.
- This time will have important implications for potential therapy.
- Early notification of the ED by the Paramedic is essential.
- Careful assessment is a must, signs of stroke can be very subtle.

#### Evaluation

- Describe the importance of rapid detection CVA/TIA symptoms in the prehospital setting.
- Describe why extensive neurological examinations are inappropriate in the prehospital setting.
- Describe the three points evaluated in the Cincinnati Stroke Scale evaluation.

# Summary

Early detection of CVA/TIA in the prehospital setting can have a dramatic effect of the mortality and morbidity of patients. In depth neurological exams are not only un-necessary in the prehospital settings but are in fact counter productive. Using the Cincinnati Stroke Scale an ECA/EMR, EMT, or Paramedic can quickly and accurately access the neurological status of a patient presenting with CVA/TIA Signs and symptoms.