

It's More than Just a Number, a Closer look at the NIH Stroke Scale

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Learning Objectives:

- Describe the purpose of the NIH Stroke Scale (NIHSS)
- Review the 11 elements of the NIHSS
- Discuss the interpretation of the scoring and outcome prediction
- Assessment of the NIHSS in a patient scenario
- Discuss tools that can be used to calculate the NIHSS

National Institute of Health Stroke Scale (NIHSS): Overview

- Standardized neurological examination, performed in a timely and uniform fashion
- Performed quickly
- Quantifies degree of neurological deficits, facilitates communication and identifies location of vessel occlusion
- Provides prognosis, patient selection for intervention, and potential complications

National Institute of Health Stroke Scale (NIHSS): Validity

- NIHSS score ≥ 8 points: predictive of neurological deterioration within the first week.
- NIHSS score > 22 points: 17% risk of Intracranial Hemorrhage (for those patients who were eligible for Alteplase)
- NIHSS score < 10 points: 3% risk of Intracranial Hemorrhage. (for those patients who were eligible for Alteplase)
- Improvement in the total NIHSS of > 3 points at 15 minutes or of > 5 points at 30 minutes predicts favorable outcomes for those given Alteplase

National Institute of Health Stroke Scale (NIHSS): Basics

- Administer stroke scale items in order
- Record responses after each section is completed
- DO NOT go back and make changes
- Follow directions provided for each exam element
- Scores should reflect what the patient does, not what the practitioner thinks the patient is capable of doing
- DO NOT coach the patient
- Average time to complete the exam 5-7 minutes

National Institute of Health Stroke Scale (NIHSS): Elements

- Level of Consciousness (LOC)
- Best Gaze
- Visual
- Facial Palsy
- Motor Arm
- Motor Leg
- Limb Ataxia
- Sensory
- Best Language
- Dysarthria
- Extinction

National Institute of Health Stroke Scale (NIHSS): Scoring

- Score for each element ranges from 0-4
- Untestable (UN) used with amputation, joint, fusion, or explanation to be provided
- Each limb is scored separately
- Maximum score 42, Minimum score 0

National Institute of Health Stroke Scale (NIHSS): Learning the NIHSS

- Web based courses
 - www.strokeassociation.com
 - www.aha.org
 - www.ninds.gov
- Train the trainer
- Videotapes, DVDs