



SWALLOW SCREEN ASSESSMENTS IN LITERATURE

The Consensus Stroke Performance Measures recommended by CDC, AHA, and The Joint Commission includes a swallow screen completed by a health care professional prior to oral intake of food, fluid or medications. A screening test need not be a formal evaluation of swallowing by a speech language pathologist (SLP) but should be standardized. Those with abnormal results should be referred for a complete examination by SLP. Below you will find a listing of swallow screens discussed in the literature specific to stroke between 1992 and 2009. The GLRSN does not endorse any particular screen.

Bedside Swallow Assessment

Description: Pre-assessment questions, clinical exam, teaspoons of water three times, followed by water in a cup.

Source: Smithard DG, O'Neill PA, Park C, England R, Renwick DS, Wyatt R, Morris J, Martin DF; North West Dysphagia Group. [Can bedside assessment reliably exclude aspiration following acute stroke?](#) *Age Ageing*. 1998 Mar;27(2):99-106.

Bedside Swallow Assessment EATS

Description: Uses 3 consistencies: semisolid, liquid and solid. Also contains pre-assessment criteria.

Source: Courtney B, Flier L. RN dysphagia screening, a stepwise approach. *Journal of Neuroscience Nursing*. 2009 Feb; 41 (1): 28-38.

Burke Dysphagia Screening Test (BDST)

Description: 3 oz. water swallow test and clinical checklist. Developed for use within stroke rehabilitation settings.

Source: DePippo KL, Holas M, Reding M. Validation of the 3-oz water swallow test for aspiration following stroke. *Archives of Neurology*. 1992 49:1259-1261.

Gugging Swallow Screen

Description: Uses three consistencies: Semisolid, liquid and solid. Also contains pre-assessment criteria.

Source: [Trapl M, Enderle P, Nowotny M, Teuschl Y, Matz K, Dachenhausen A, Brainin M.](#) Dysphagia bedside screening for acute-stroke patients: the Gugging Swallowing Screen. *Stroke*. 2007 Nov;38(11):2948-52.

Kidd Water Test

Description: Clinical examination includes pharyngeal sensation assessed by orange stick, tongue and facial movement, speech, sensory and perceptual function and muscle strength also assessed. Ability to swallow also assessed by patient swallowing 50 ml of water in 5 ml allotments.

Source: Kidd D, Lawson J, Nesbitt R, MacMahon J. Aspiration in acute stroke: a clinical study with videofluoroscopy. *Quarterly Journal of Medicine*. 1993 86:825-829.

Massey Bedside

Description: Water test designed for nurses. Uses 1 teaspoon of water followed by glass of water. Also contains pre-assessment criteria.

Source: [Massey R, Jedlicka D](#). The Massey Bedside Swallowing Screen. *J Neurosci Nurs*. 2002 Oct;34(5):252-3, 257-60.

Nishiwaki et al.

Description: Scores 6 items including lip closure, tongue movement, palatal elevation, gag reflex, voice quality and motor speech function. Also includes a saliva swallowing test. After patient swallows 1 teaspoon of water twice, asked to drink the rest of the water from a cup for a total of 30 ml.

Source: [Nishiwaki K, Tsuji T, Liu M, Hase K, Tanaka N, Fujiwara T](#). Identification of a simple screening tool for dysphagia in patients with stroke using factor analysis of multiple dysphagia variables. *J Rehabil Med*. 2005 Jul;37(4):247-51.

Scottish Intercollegiate Guidelines Network (SIGN)

Description: Recommends the Clinical Bedside Assessment developed and tested by Longemann.

Source: Scottish Intercollegiate Guidelines Network. Management of Patients with Stroke: Identification and Management of dysphagia. September 2004. www.sign.ac.uk

Standardized Swallowing Assessment (SSA)

Description: Pre-swallowing check list if passed is followed by teaspoon sips of water 3 times, followed by half glassful of water. (Grade A, strong evidence Westergren, 2006).

Source: Perry, L. Screening swallowing function of patients with acute stroke. Part one: identification, implementation and initial evaluation of a screening tool for use by nurses. *Journal of Clinical Nursing* 2001; 10: 463±473.

Timed Test

Description: Pre-assessment criteria. Small amount of water given to patient with teaspoon. If tolerated, patient is given 100 – 150 ml of water and told to drink the water as quickly as possible. Residual water left over is measured. The number of swallows is counted by observing the movement of the thyroid cartilage. Stopwatch is started when the first drop of water touches the lip. Also includes a patient questionnaire.

Source: [Hinds NP, Wiles CM](#). Assessment of swallowing and referral to speech and language therapists in acute stroke. *QJM*. 1998 Dec;91(12):829-35.

TORBSST®

Description: Includes voice before, tongue movement, the Kidd Water test, and voice after. Tool not printed. Must participate in 4 hour training.

Source: Martino, R, Silver, F, Teasell R, Bayley M, Nicholson G, Streiner D, Diamant N. The Toronto bedside swallowing screening test (TOR-BSST): Development and validation of a dysphagia screening tool for patients with stroke. *Stroke* 2009; 40; 555-561.