The Construct Validity of the TOR-BSST for Nursing Home Residents

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Abstract

**Purpose:** A dysphagia screening tool for nursing homes should be short and easy to administer. The Toronto Bedside Swallow Screening Test (TOR-BSST) was proven feasible and reliable for people suffering from dementia and/or stroke. The purpose of this study was to evaluate the construct validity of the adjusted, Dutch version of the TOR-BSST.

**Method:** A cross-sectional study was performed in 91 nursing home residents (62 males) with a mean age of 85 (SD=6.7), suffering from stroke (23%), dementia (22%) or (multiple) other disorders.

**Results:** According to pre-existing medical records 24 (26%) had oropharyngeal dysphagia. A total of 89 residents were screened with the TOR-BSST and the Volume Viscosity Swallow Test (V-VST) in a randomized order by 3 blinded, independent SLT’s. According to both screening tools, 25 (28%) residents were at risk for dysphagia and were detected within the first 3 sips of the TOR-BSST (n=17) and the thin liquid items 5 ml or 10 ml of the V-VST (n=20). In 79 cases (89%) there was an absolute agreement between the TOR-BSST and the V-VST.

**Conclusion:** The convergent validity, as assessed by correlations between the TOR-BSST and the V-VST, was strong (r=0.75). The TOR-BSST proved to be a valid and feasible screening tool for the nursing home population. However a good implementation, including staff training is necessary to guarantee optimal care in dysphagia screening and management. Criterion validity needs to be confirmed with more objective measurements such as FEES or VFSS.