

Challenges for Assessing Oropharyngeal Dysphagia: The Role of the Eating Assessment Tool-10 (EAT-10)

K.V. Giudici

Gerontopole of Toulouse, Institute of Aging, Toulouse University Hospital, Université Toulouse III Paul Sabatier, Toulouse, France.

Corresponding Author: Kelly Virecoulon Giudici, Gérontopôle de Toulouse, Institute of Aging, Toulouse University Hospital, Université Toulouse III Paul Sabatier, 37 Allée Jules Guesde, 31000 Toulouse, France, E-mail: kellyjudici@gmail.com

Abbreviations: EAT-10: Eating Assessment Tool-10; JNHA: Journal of Nutrition, Health & Aging; OD: oropharyngeal dysphagia.

Oropharyngeal dysphagia (OD) is a condition with a high potential to impair nutritional status (especially among older adults) (1). This difficulty or inability in the initial stages of swallowing (impairing the safe and effective movement of a bolus from the oral cavity to the esophagus) can be caused by structural, anatomical, or neuromuscular alterations, and happen more often in older adults, patients with neurological or neurodegenerative diseases, and subjects with head or neck pathology such as cancer (2–4). In consequence, undiagnosed and untreated OD impairs regular dietary intake (5), especially the intake of hard and fibrous food, as meat, nuts and raw vegetables, which are source of important bioactive compounds and nutrients such as protein, dietary fiber, vitamins, and minerals (6). As malnutrition is an open door to sarcopenia (7), to frailty (8), and to the development of several chronic diseases (9), it is of high importance to timely diagnose OD and to treat it. Moreover, other serious potential consequences of OD includes dehydration, respiratory infections and aspiration pneumonia (5).

With a poor prognosis, OD is now considered a geriatric syndrome by the Dysphagia Working Group (10), and demands a multidimensional clinical approach. The fact that affected patients may not always be aware of their condition highlights the need for adequate diagnosis, which if early detected, can prevent the deterioration of health status and reduce the risk of complications, dependency, prolonged hospital stays, and mortality, together with the reduction of economic and social costs derived from those factors (11–13).

The Eating Assessment Tool-10 (EAT-10) was developed by a multidisciplinary team to be a low-cost, simple, quick and self-administered screening tool for OD (14, 15). Based on subjective assessment, the EAT-10 evaluates three domains (emotional, physical and functional) with ten questions, for which 1 point can be given in each – an overall score of ≥ 3 points can be considered abnormal swallowing (i.e., dysphagia) (14). As a bonus, some of these questions are also capable to help identifying gastro-oesophageal reflux disease (16) and aspiration risk (17, 18). After 15 years from its launching and

11 years since its first transcultural adaptations and language translations (to Spanish (19) and Portuguese (20)), Schidler et al. (21) now revisits its use in clinical practice and research, in the article that can be found in this issue of the Journal of Nutrition, Health & Aging (JNHA). Aiming to identify aspects of the validation, applicability, and usefulness of the EAT-10, the authors performed a literature review in five databases (with no restrictions on the language, date of publication or design of the study) that led to the inclusion of 46 studies, published from 2008 to 2022.

In the article, readers are invited to know more about the benefits of the EAT-10 use in real clinical practice, its significant features, and special considerations about the adaptation of the EAT-10 to different languages and cultures. Until 2022, over 15 translations, cultural adaptations and validations have been developed for the EAT-10 (15–17, 20, 22–31), with good overall results for its psychometric properties of real clinical practice. As an interesting point, some of the studies testing the applicability of the EAT-10 suggested reducing the cutoff to ≥ 2 points, to avoid missing any patient with dysphagia (12, 32).

One of its main benefits is that the final score can be easily determined without the need of formulas or visual analogue measurements. In addition, it can be fully answered in four minutes or less (33, 34). These characteristics contribute to make it suitable for non-specialized health care providers to screen for OD. On the other hand, as a limitation, the self-assessment format may not be adequate to patients with mild to severe cognitive impairment or with psychiatric conditions. Other aspects as its structural validity, internal consistency, and item redundancy have also been explored.

In conclusion, EAT-10 has shown to be a versatile instrument for the screening of OD, with additional abilities that multiplies its potential use in clinical practice. By favoring the early detection of dysphagia and helping to identify changes on its severity over time, it stands as an important tool that contributes to improve public health care in different settings (including hospitals, nursing homes, and external consultation) and quality of life of people affected by OD.

Conflict of interest: None.

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