

Read & Watch: Lecture Summary



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Discussing the scientific evidence supporting the EAT-10 validity and its use in routine clinical practice

Speaker biography

Dr. Ana Cantón, MD, PhD. obtained her Medical Degree (MD) in 1992 at the University of Santiago de Compostela. She developed her residency in Endocrinology and Nutrition at the Hospital Vall d'Hebron, Barcelona (1993-1996). She received a grant from the British Council in 1996 and spent a fruitful period at the St Bartholomew's Hospital, London (1997-1998). She obtained her Doctorate of Philosophy (PhD) in 2001 at the Universitat Autònoma de Barcelona. She is Senior Consultant in Endocrinology and Nutrition and Head of the Clinical Nutrition Unit at the University Clinical Hospital of Santiago de Compostela. She is Assistant Professor of Medicine, Endocrinology, at the School of Medicine at the University of Santiago de Compostela. She is the author of several scientific publications and book chapters that are indexed. She has been a speaker in several national and international congresses and scientific meetings.

Abstract

Oropharyngeal dysphagia (OD) is a highly prevalent medical condition with severe complications such as dehydration, malnutrition, and respiratory infections.

Recognition of dysphagia in the medical community can be poor¹, health services rarely screen older patients for dysphagia and often do not train their staff to diagnose it². Symptoms of dysphagia such as coughing may not be recognised as a problem by older people themselves or their caregivers and are often considered a trivial finding². Among others, these are the reasons why many patients are diagnosed during hospitalisation, after developing respiratory infections or pneumonia due to an impairment of the safety of their swallowing. Undiagnosed swallowing problems put this group of people at risk, leading to complications and high health care costs. In a recent publication by Clave *et al*³, it was demonstrated that an in-patient with undetected dysphagia before hospitalisation, has a cost increase of 40.36% and an 8.42-day hospital stay. Therefore, it is time to take action!

In frail, institutionalised and hospitalised older adults, or when an acute condition develops, possibly impairing a patient's swallowing function, or in adults when risk factors are present, dysphagia should be systematically screened.

There are multiple screening tools available to detect the risk of OD in adults. Bernardes *et al.* performed a review to map screening tools and found that the Eating Assessment Tool (EAT-10) was the most commonly used tool for dysphagia screening⁴. The "European Guidelines for the Assessment of Voice Quality in Clinical Practice" recently developed by the European Laryngological Society and The Union of the European Phoniaticians, recommended the use of the EAT-10 as one of the valid screening tools for the assessment of dysphagia, Grade of Recommendation B⁵.

The Eating Assessment Tool (EAT-10) is a symptom-specific outcome tool for dysphagia designed to rate the degree of self-perceived swallowing impairment. It is a 10-item questionnaire with a Likert scale response option (0 no problem to 4 severe problems) with a direct scoring analogue instrument for swallowing disorders (0-2 normal range and 3-40 indicative of swallowing problems) that has demonstrated excellent internal consistency and reproducibility.

The EAT-10 has been used in multiple studies evaluating the elderly population with neurological disorders, neuromuscular disorders, head and neck cancer, multiple sclerosis, chronic obstructive pulmonary disease, apnoea, and high-risk hospitalised patients².

Transcultural adaptation and translation studies have shown the validity and reliability of EAT-10 in relation to the gold standard and other validated instruments⁷. The internal consistency (Cronbach's α) between different versions ranged from 0.84 to 0.96 and intraclass correlation coefficients (ICCs) ranged from 0.70 to 1.00³. The psychometric properties of the EAT-10 have been tested also in some studies and produced good overall results, thus encouraging its use in real clinical practice⁷. Over 15 translations, cultural adaptations, and validations have been developed for the EAT-10: Spanish (Spain, Chile, and Colombia), French, Italian, Portuguese (European and Brazilian), German, Chinese, Japanese, Arabic, Dutch, Greek, Hebrew, Swedish, and Turkish⁷.

In a systematic review and meta-analysis published in 2023, Zhang *et al.* evaluated the diagnostic accuracy of EAT-10 cutoff value to better guide clinical use. A flexible endoscopic evaluation or a video fluoroscopic swallowing study was used as the gold standard. The cutoff of 3 was recommended, as previously demonstrated by Belafsky *et al.*⁸ in 2008. Different cutoff points can predict the aspiration risk in patients with OD^{7,8} in specific populations (neurological disorders, head and neck cancer, COPD, and obstructive sleep apnea).

Although the EAT-10 is a self-administered screening tool, it cannot be used by some people who have certain diseases that affect handwriting (Parkinson's disease, etc.) or who are unable to read (age-related macular degeneration, glaucoma, etc.). In these cases, when the individuals maintain their cognitive function, the EAT-10 requires the participation of a third-party as demonstrated in some publication's healthcare professionals, clinical staff, researchers, family members or caregivers could help the patient to complete the EAT-10⁹⁻¹⁵.

Conclusion

The EAT-10 is a quick, easy to understand, valid and reliable test applicable in patients with dysphagia of several etiologies in different settings. The EAT-10 stands as an important tool for early detection of dysphagia, contributing to improve public health care and quality of life of those affected by OD.

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Watch the 18 minute conference talk with Dr. Ana Cantón Blanco, MD, PhD, DISCUSSING THE SCIENTIFIC EVIDENCE SUPPORTING THE EAT-10 VALIDITY AND ITS USE IN ROUTINE CLINICAL PRACTICE



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