

# Screening for Dysphagia: Time Is Now!

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## Introduction

Oropharyngeal dysphagia (OD) is a condition characterized by symptoms and signs which refer to a difficulty in forming or moving a bolus safely and efficacy from the oral cavity to the oesophagus. The aging process induces several changes of the head and neck anatomy and function, the so called presbyphagia, that may falter the mechanisms of swallowing and make older subjects more prone to develop OD.

Because of its high frequency among older people, its multifactorial aetiology, its association with several diseases, its negative consequences, and the need of a multidimensional approach to be treated, OD has been recognized as a geriatric syndrome (1, 2).

OD can also be induced or worsened by multiple factors that might contribute to create a temporary difficulty in swallowing, such as drug treatments (3, 4), in particular those with a high anticholinergic burden, or acute diseases and conditions, especially those impairing consciousness, e.g. sepsis (5) and delirium (6).

OD prevalence increases with increasing age and clinical complexity, including a greater number of chronic conditions, more severe disability and frailty, and varies between different care settings as well as in relation to the diagnostic methodology used, e.g. questionnaire, clinical or instrumental evaluation (7). In community-dwelling older people its prevalence ranges from about 10% up to 30-40% (2), and it is even more common condition in nursing homes where it might be found in up to 60% (2) of the residents and in hospitalized older adults, with figures as high as 80% (8).

OD is also strongly and independently associated with other common geriatric syndromes and conditions, such as frailty and sarcopenia (9), with which shares several risk factors, pathophysiological pathways and complications.

OD, especially when it goes unidentified, can cause severe complications, i.e. malnutrition (10), dehydration and penetration and aspiration, which in turn might cause respiratory infections and aspiration pneumonia, leading to hospitalization, institutionalization and mortality (2).

On the other hand, the recognition that the patient has dysphagia can allow to implement specific treatments, considering the OD severity and patient characteristics, which can reduce the risk of negative clinical outcomes (11).

Despite its negative consequences OD is frequently underdiagnosed: there is a common tendency to consider

symptoms such as coughing a trivial finding in older people, older subjects themselves and their caregivers may not recognize coughing as a problem and may not be aware of the presence of dysphagia (12), and also many physicians and health care professionals do not regularly investigate symptoms of OD and swallowing difficulties.

Several tools have been developed to perform the screening of dysphagia. However, the majority of health services rarely screen older patients for dysphagia and do not train their staff to diagnose it (12, 13).

In this issue of *The Journal of Nutrition, Health & Aging*, Schidler A. et al provide a comprehensive review of the literature on the Eating Assessment Tool-10 (EAT-10) (14, 15), evaluating and discussing the scientific evidence supporting its validity and its use in routine clinical practice.

The authors reported that the EAT-10 is a rapid (3-4 minutes), easy and self-administered (10 questions exploring functional, emotional, and physical domains) screening tool, which has good psychometric properties.

Although different cut-offs have been used in the literature, the value of 3 is recommended, as it has the best diagnostic accuracy (16).

It has also the advantage to have undergone numerous transcultural adaptations and translations in different languages.

When patients screen positive at the EAT-10 assessment, they should undergo further clinical and instrumental assessment, to confirm OD and assess its severity.

It should be pointed out that EAT-10 has its own limitations in certain populations, mainly in individuals with moderate to severe cognitive impairment or severe psychiatric conditions, in which difficulties in understanding the questions and limitations in providing self-reports of symptoms may affect the accuracy and validity of the tool's results, although it has been also used in studies on older adults affected by dementia (17). Moreover, recent re-assessment of the EAT-10 using Rasch analysis has questioned its psychometric properties (18, 19).

In recent years, the incidence and prevalence of OD (20) have been rising, reflecting the increasing complexity of the aging population. Therefore, it becomes mandatory to raise the awareness about dysphagia in older people and in those involved in their care.

In conclusion, three main suggestions can be made concerning OD:

1) Being a geriatric syndrome, it is necessary to overcome the concept of dysphagia only as a condition strictly related to specific diseases, such as stroke, dementia and Parkinson's

disease. In older adults, especially when risk factors are present, a screening for OD should be always performed to identify those subjects who could benefit for further clinical and instrumental assessments in order to early diagnose OD and put in place treatment strategies to prevent OD complications.

For instance, dysphagia should be systematically sought in the institutionalized and hospitalized older adults, as well as in frail older adults. Other authors have proposed to screen at least once a year all older adults aged 80 and over (21).

2) Screening for dysphagia should be also performed when an acute condition develops, possibly impairing patient's swallowing function. In these cases, OD should be reassessed once the precipitating factors have been treated or resolved, to identify a possible recovery of the swallowing function.

3) Periodic re-evaluations of swallowing in older adults is also strongly recommended, since many clinical conditions such as frailty and dementia tend to evolve over time or a new disease may develop.

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