



There Is No Place Left Where Ultrasound Does Not Reach: Touching Dysphagia

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Dear Editor,

Dysphagia is a common and debilitating condition that affects millions of people worldwide.^[1] The use of ultrasound as a diagnostic tool for dysphagia has gained increasing interest in recent years due to its numerous advantages over traditional diagnostic methods. In this letter, we will discuss the advantages of using ultrasound in the management of dysphagia, including its accuracy in identifying the underlying cause of dysphagia, its safety, and its cost-effectiveness.

A significant advantage of ultrasound is its accuracy in identifying the underlying cause of dysphagia. Ultrasound provides real-time imaging of the swallowing process, allowing clinicians to identify any structural abnormalities or functional impairments that may be contributing to dysphagia.^[2]

Another benefit of ultrasound is its safety. Unlike barium swallow studies and endoscopic evaluations, which require the use of radiation or sedation, ultrasound is non-invasive and does not expose patients to harmful radiation. This makes it an ideal diagnostic tool for patients who cannot tolerate more invasive procedures or who are at increased risk of complications from sedation or radiation exposure.^[2,3]

In addition to its accuracy and safety, ultrasound is also cost-effective. Traditional diagnostic methods, such as barium swallow studies and endoscopic evaluations, can be

expensive and time-consuming. In contrast, ultrasound is a relatively inexpensive and readily available diagnostic tool that can be performed quickly and easily in a clinical setting. This makes it a more accessible option for patients who may not have access to more expensive diagnostic methods.^[2,4]

A limited number of studies have examined the reliability of ultrasound in identifying structural or functional abnormalities in dysphagia, as well as in detecting aspiration and pharyngeal residue. Miura et al.^[5] found the sensitivity and specificity of ultrasound to detect aspiration in dysphagia to be 0.82 (95% CI: 0.72–0.89) and 0.87 (95% CI: 0.81–0.92), respectively. The sensitivity and specificity for the detection of pharyngeal residue were 0.62 (95% CI: 0.32–0.86) and 0.67 (95% CI: 0.22–0.96), respectively. These results show that ultrasound lags behind videofluoroscopy, which is the gold standard for the diagnosis of aspiration and pharyngeal residue.

With the increasing interest in ultrasound as a diagnostic tool for dysphagia, it is important that clinicians and researchers continue to explore the potential benefits and limitations of ultrasound. However, while ultrasound is an effective method for detecting mechanical causes of dysphagia, it is inadequate for detecting aspiration and penetration and is its weakness compared to gold standard tests. Therefore, it is important to be cautious when using ultrasound to diagnose

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dysphagia. Further research is needed to determine the optimal use of ultrasound in the management of dysphagia and to identify potential barriers to widespread adoption.^[4]

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