LETTER TO THE EDITOR

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Letter to the editor in response to the Japanese clinical practice guidelines for rehabilitation in critically ill patients 2023 (J-ReCIP 2023)

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Dear Editor,

We applaud Unoki et al. on their recent development of the Japanese clinical practice guidelines (CPGs) for rehabilitation in critically ill patients 2023 (J-ReCIP 2023). These aim to advocate for early initiation of rehabilitation in Japanese Intensive Care Units (ICU) to optimize patient outcomes. Whilst a rigorous methodology were used, evidence informing these guidelines were limited to RCTs and failed to consider important evidence offered

by other research designs on assessment of swallowing function. As Speech Pathologists, our comments relate specifically to the WG3 Dysphagia and the recommendation made against the use of videoendoscopic swallowing assessment.

We agree that the exact prevalence of dysphagia is uncertain, with reports up to 91% [1]. Dysphagia in critical illness is a common issue with multiple negative long term sequelae and is significantly associated with an increased risk of mortality [2, 3]. Accurate and comprehensive assessment of swallow function, opposed to screening in isolation, is key to evidence-based informed management. The authors report swallowing function is often impaired due to interventions such as the placement of endotracheal and tracheostomy tubes and other surgical procedures. These aetiologies extend further to include both comorbidities and current acute medical diagnoses with their associated complications. Specifically, diagnosed sepsis, critical illness neuromyopathy, reflux, altered ventilation status, and impaired cognition can impair both the safety and efficiency of swallow function [4, 5]. Early rehabilitation in this population should optimize sensory and motor function with interventions including laryngeal re-sensitization and restoration of airflow through the upper airway to promote sensation, swallow, cough, smell and communication.

While swallow screening in the ICU is an initial step for identifying dysphagia, few existing screening tools have been validated for use in the critical care setting and importantly, screening is not equivalent to

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Zaga et al. Journal of Intensive Care

comprehensive assessment. Attachment to medical devices and lack of mobility does not preclude swallowing assessment in ICU. Commonly, Speech Pathologists will commence intervention with the clinical swallowing evaluation (CSE), which includes oral peripheral and cranial nerve examinations, assessment of upper airway function and suitability of oral trials to determine the presence, severity, and pathophysiology of dysphagia. Significant limitations exist with the CSE, as subjective inferences are made which are not grounded in strong evidence. As the authors highlighted, silent aspiration is common in critically ill patients and difficult to detect via CSE. Therefore, the gold standard instrumental assessments of Flexible Endoscopic Evaluation of Swallowing (FEES) (referred to as videoendoscopic examination of swallowing in Unoki et al.'s article) and videofluoroscopic swallowing studies offer paramount diagnostic accuracy [4]. As FEES is conducted at the bedside, it is ideally suited to the ICU setting and shown to be both safe and efficacious [6]. These assessments uniquely offer assessment of (1) presence and degree of laryngeal penetration and aspiration; (2) response to airway compromise (no response, silent laryngeal penetration or silent aspiration, successful or unsuccessful attempt to eject the bolus from the airway); (3) the dynamic swallowing profile across oral, pharyngeal and upper oesophageal domains; (4) swallow timing, motor and sensory functions; (5) presence and degree of bolus residue; (6) impact of structural changes on the swallow function (e.g., vocal cord palsy); (7) secretion management and the impact on airway protection; (8) targeted physiology-based rehabilitation planning. FEES also provides detailed information from visualization of laryngeal injury following intubation or other comorbidities, which can impact multidisciplinary tracheostomy weaning and decannulation decisions. The authors report the findings of Barquist et al.'s [7] study as increased harm (defined as increased aspiration) in the intervention group. It is important to consider whilst there was more aspiration noted, aspiration was not associated with FEES, but rather FEES was more responsive to detecting harms, hence the increased prevalence. As aspiration can lead to pneumonia, early detection of harm (i.e. aspiration) is vital to mitigate further morbidity and mortality risk, and in turn can optimise patient safety.

We therefore strongly disagree with the recommendation against using videoendoscopic examination of swallowing to manage critically ill patients. Our opinion is that FEES is an essential component of assessment and management of swallowing, and this is upheld by guidelines of Peak National Associations [8]. FEES can expedite the commencement of safe oral

intake due to its accuracy in detection of aspiration risk [9] over other assessment methods [6]. Commencement of earlier safe oral feeding is crucial to improvement in mood, nutrition and engagement in physical rehabilitation. Therefore, the recommendation against utilizing FEES seems in direct opposition to the goal of diagnostic accuracy for evidence informed rehabilitation. Indeed, a suboptimal swallow assessment is potentially of greater harm due to the known sequelae of morbidity, cost, and mortality of dysphagia.

We agree that future research is warranted to further determine the prevalence of dysphagia, and there is an urgency to guide the optimal approach to dysphagia assessment, distinguishing screening from clinical assessment. Whilst we acknowledge that the evidence could be strengthened further in the rehabilitation context, we urge the authors to reconsider their position on FEES and make a conditional recommendation advocating for dysphagia management based on videoendoscopic examination in the critically ill.

Acknowledgements

None.

Author contributions

Conceptualization (CJZ), writing—original draft (CJZ), writing—review and editing (CJZ, SW, AFS).

Funding

No funding.

Availability of data and materials

Not applicable.

Declarations

Ethics approval and consent to participate

Not applicable

Consent for publication

Yes.

Competing interests

Not applicable.

Received: 6 March 2024 Accepted: 25 April 2024 Published online: 27 June 2024

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