

Use of Ultrasound for Swallowing and Upper Airway Assessment

February 2021

RCSLT updated statement: We continue to advise our members not to initiate the use of airway or swallowing ultrasound for routine assessment and clinical decision-making.

In the spring of 2020, the use of SLT-led endoscopy was restricted due to safety concerns in the context of the COVID-19 pandemic. In response, SLTs began exploring alternative adjuvant methods to support their clinical decision-making for the assessment of the upper airway and swallowing. Specifically, the utilisation of ultrasound was discussed across networks. Subsequently an international group* of multidisciplinary clinicians was established, and an appraisal of the literature was performed to ascertain the current position on the utility of ultrasound in speech and language therapy services. Whilst this work was underway, the RCSLT advised members not to initiate the use of airway and swallowing ultrasound for patient assessment and clinical decision-making.

In December 2020, a rapid systematic review exploring the utility of ultrasound for swallowing and laryngeal assessment was published by the expert working group in the *International Journal of Language and Communication Disorders*¹. While there is growing evidence to support the use of ultrasound as an adjunct to SLT clinical assessment of swallowing and laryngeal function, the current literature does not support its use as a standalone tool. Further work is required before ultrasound assessment can be safely and effectively translated into widespread routine SLT clinical practice. Examples of this underpinning work include the development of normative data, assessment protocols, measurement standardisation and the development of training competencies.

The RCSLT risk-management matrix² has supported the safe re-introduction of fiberoptic endoscopic evaluation of swallowing (FEES) and videofluoroscopy for instrumental assessments, with a return to usual policy standards since October 2020 for FEES. This eliminates the immediate urgent need for ultrasound in the clinical setting and allows time for evidence-based implementation of ultrasound into the profession in a planned manner. The international working group will continue to keep RCSLT members updated with progress and outcomes as it continues to work towards the safe and effective implementation in speech and language therapy practice.

If you have research skills and an interest in developing the evidence base in this specialist field, please express your interest in joining the working group by emailing amelia.heelan@rcslt.org. In the interim, the RCSLT continues to advise its members **not to** initiate the use of airway or swallowing ultrasound for routine assessment and clinical decision-making.

1 Allen JE, Clunie GM, Slinger C et al (2020) Utility of ultrasound in the assessment of swallowing and laryngeal function: A rapid review and critical appraisal of the literature. *International Journal of Language & Communication Disorders*: <https://doi.org/10.1111/1460-6984.12584>

2 <https://www.rcslt.org/wp-content/uploads/media/RCSLT-COVID19-SLTled-endoscopic-procedure-guidance151020.pdf>

*Current membership of the International Ultrasound Group:

Name	Job Role	Place of Work
Jodi Allen	Senior Speech and Language Therapist (Neurology & Neuromuscular)	The National Hospital for Neurology & Neurosurgery (part of University College London Hospitals) UK
Sally Richmond	Consultant Head and Neck Radiographer	Imaging Dept UCLH, UK
Dr Roganie Govender	Consultant Speech and Language Therapist/Clinical Academic	Head & Neck Cancer UCLH, UK
Claire Slinger	Consultant Speech and Language Therapist Airways Team Service lead	Lancashire Chest Centre, Royal Preston Hospital, Preston, Lancashire, UK
Dr Katharina Winiker	Research Associate	Swiss University of Applied Sciences for SLT, Switzerland
Charissa Zaga	Senior Speech Pathologist and Stream Leader for Ventilation Weaning Unit and PhD Candidate	The Austin Hospital, Melbourne, Australia & University of Melbourne, Australia
Gemma Clunie	Clinical Specialist Speech and Language Therapist (ENT/Airways) and NIHR Clinical Doctoral Fellow	Imperial College Healthcare NHS Trust & Imperial College London
Corinne Mossey-Gaston	Speech and Language Therapy Lead	Royal Papworth NHS Foundation Trust, Cambridge, UK
Marloes Lagarde	Speech and Language Therapist and PhD candidate	Amalia Children's Hospital, Radboud university medical center, Nijmegen, the Netherlands
Dr Lenie van den Engel-Hoek	Speech and Language Therapist and Assistant Professor	Amalia Children's Hospital, Radboud university medical center, Nijmegen, the Netherlands
Professor Maggie-Lee Huckabee	Academic research in swallowing and swallowing disorders	University of Canterbury Rose Centre for Stroke Recovery and Research, Christchurch, New Zealand
Lisa Hayward	Senior Physiotherapist (Critical care)	Blackpool Teaching Hospitals (BTH) NHS Foundation Trust North West, UK
Alan Wrench	Consultant Professor at Centre for Audiology, Speech and Language; Managing director of Articulate Instruments Ltd; Signal processing engineer	Centre for Audiology, Speech and Language. Queen Margaret University, Edinburgh, UK
Dr Joan Ma	Lecturer in Speech and Hearing Division	Queen Margaret University, Edinburgh, UK
Jemma Haines	Consultant Speech and Language Therapist, Airways and PhD Candidate	Wythenshaw Hospital, Manchester, UK
Sarah Wallace	Consultant Speech and Language Therapist, critical care	Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester, UK
Soren Lowell	Professor Associate Chair Communication Sciences and Disorders	Voice and Swallowing Physiology Laboratory, Syracuse University, New York
Becca Hammond	Professional Clinical Lead, Speech and Language Therapy	Waitematā District Health Board, Auckland, New Zealand