

Training Speech Pathologists to Utilize an Oesophageal Sweep during Videofluoroscopy.

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Introduction

Videofluoroscopy Swallowing Studies (VFSS) are the gold standard for diagnosing oral and pharyngeal swallowing disorders. With two-thirds of adults presenting for VFSS having oesophageal abnormalities¹, it seems prudent to include visualisation of the oesophagus, in context with the entire swallow process, to provide further information to the diagnostic team. Specific SP training in oesophageal sweep, within Australia, has been encouraged² to ensure standardised practices are implemented and SPs feel more confident to conduct these studies.

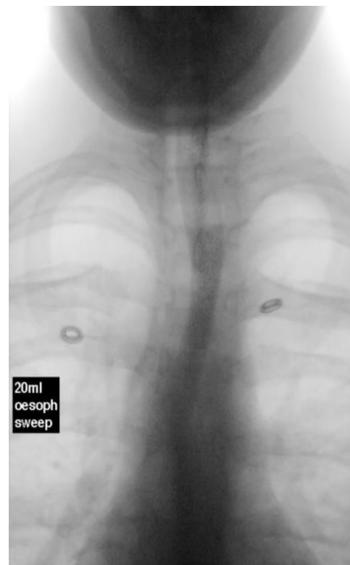
Aims

This study aims to evaluate the ability of speech pathologists (SPs) to identify oesophageal abnormalities observed on VFSS and refer on for further evaluation, and the relative improvement in that ability with training.

Methodology

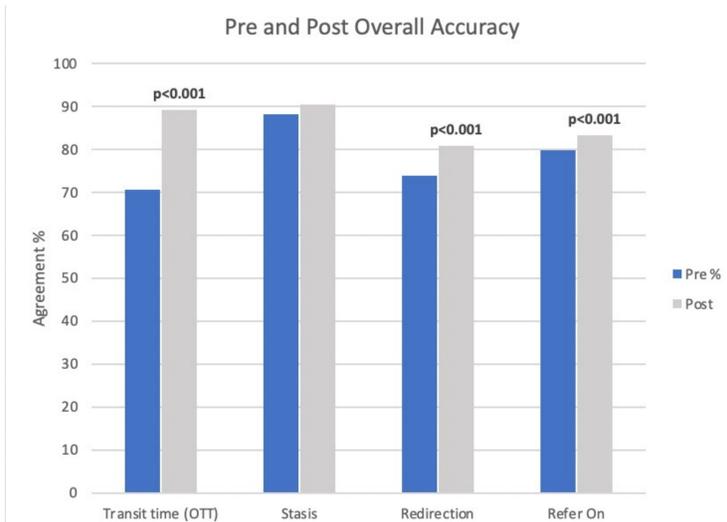
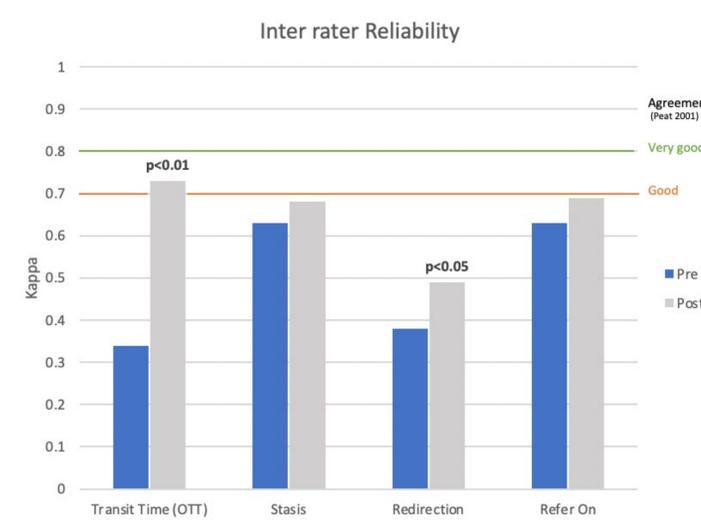
One hundred SPs were trained in oesophageal physiology and oesophageal visualisation during a 6-hour online education workshop, with a senior SP and two fellowship trained laryngologists, based on a previous study³. Ten oesophageal sweep videos (5 normal/ 5 abnormal) with a single 20ml thin fluid barium bolus (19%w/v) were presented at baseline, and again, following training. Raters were blinded to all clinical information, other than age. Binary ratings were collected for Oesophageal Transit Time (OTT), presence and location of stasis, presence of redirection, and referral on to other specialties for further diagnostic evaluation.

1. Miles A, McMillan J, Ward K, Allen J. (2015) Esophageal visualization as an adjunct to VFSS. *Otolaryngol Head Neck Surg.* 2015;152(3):488-93. 2. McCarthy K, Finch E, Miles A. (2022) Oesophageal screening in VFSS: Perceptions and practices of Australian speech-language pathologists. *Int J Speech Lang Pathol.* 3. Miles A. Inter-rater reliability for SLT's judgement of oesophageal abnormality during oesophageal visualization. *IJLCD.* 2017;52(4):450-5.



Results

- Post education inter-rater reliability improved for all parameters, reaching significance for OTT ($p < 0.01$) and Redirection ($p < 0.05$).
- Overall agreement, improved significantly after education & training for all parameters ($p < 0.001$), except stasis, where improvement was only slight.
- Interaction, or difference in pre-post change for negative agreement and pre-post change for positive agreement, was statistically significant ($p < 0.001$) for redirection.



Conclusions

Findings indicate that SPs can improve their ability to interpret oesophageal screening on VFSS with training and can identify abnormal screening which should be referred on for further evaluation. This supports the inclusion of an oesophageal sweep in the VFSS protocol for trained clinicians.

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