Abstract

Objective: To systematically review the literature over a ten-year period on the efficacy of vocal fold medialization for the treatment of dysphagia in patients with vocal fold paralysis.

Methods: Electronic searches were conducted in OVID MEDLINE, EMBASE, and The Cochrane Library, using terms relating to vocal fold paralysis, medialization procedures, and dysphagia outcomes from 2007-2016. This was supplemented by hand searching relevant articles. Eligible articles were independently assessed for quality by four different authors from two different institutions.

Results: The database search revealed 135 non-duplicate articles. Five articles meeting eligibility criteria were included in this study. These articles evaluated the efficacy of vocal fold medialization for treatment of dysphagia in 183 patients with vocal-fold paralysis. Medialization in these patients was achieved by type I thyroplasty (58.5%), vocal fold injection augmentation (21.3%), or modified arytenoid lateralization. Specifically, data; however, all studies reported improvement in swallowing function after medialization. Furthermore, there was an 88.5% improvement in aspiration after medialization in patients overall. Despite variations, each study did show improvement in patient swallowing outcomes after VF medialization. Both unvalidated subjective measures and validated objective (PENASP) and subjective (EAT-10) measures limit our ability to compare data.

Conclusions: There is evidence to suggest that vocal fold medialization may be an effective treatment for dysphagia in patients with vocal fold paralysis. Both unvalidated subjective measures and validated objective (PENASP) and subjective (EAT-10) measures show improvement in patient swallowing outcomes after VF medialization. No evidence that one medialization technique is superior for treatment of dysphagia, however, there are no direct comparison studies. Comparison studies with validated outcome measures are necessary.

Introduction

- Dysphagia affects ~4.0% of adults, and is common in patients with vocal fold (VF) paralysis.
- VF medialization has been shown to improve voice and breathing related quality-of-life (QOL) measures.
- However, there is little data related to dysphagia QOL measures after VF medialization.
- This is a systematic review of the effect of VF medialization on dysphagia secondary to VF paralysis.

Discussion

- VF medialization may be an effective treatment for dysphagia in patients with VF paralysis.
- Limitations: Differences in patient population, medialization techniques, and outcome measures limit our ability to compare data. Variation in medialization techniques & swallow outcome measures among studies.
- Despite variations, each study did show improvement in swallowing.

Conclusions

- Vocal fold medialization may be an effective treatment for dysphagia in VF paralysis.
- Both unvalidated subjective measures and validated objective (PENASP) and subjective (EAT-10) measures show improvement in patient swallowing outcomes after VF medialization.
- No evidence that one medialization technique is superior for treatment of dysphagia, however, there are no direct comparison studies.
- Comparison studies with validated outcome measures are necessary.