

CLINICIAN ATTITUDES REGARDING CANDIDACY FOR TRACHEOESOPHAGEAL PUNCTURE

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Introduction

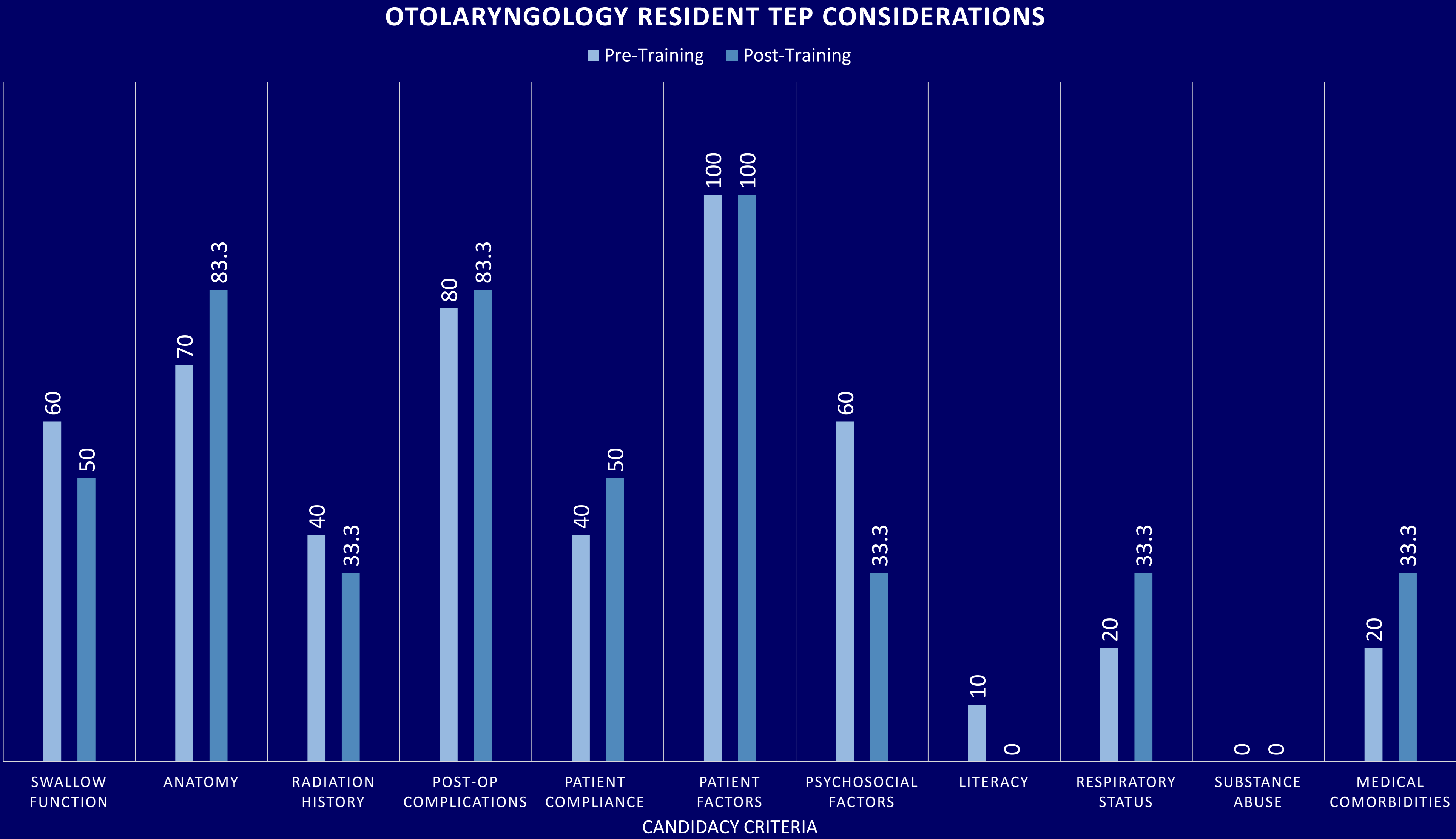
The American Cancer Society’s most recent estimates for laryngeal cancers in the United States for 2019 indicate that approximately 12,410 people will develop this malignancy¹. Total laryngectomy is recommended for many advanced laryngeal cancers, which leaves the patient aphonic, and requiring alaryngeal voice restoration. Tracheoesophageal (TE) puncture with placement of a voice prosthesis is one of the methods for voice restoration, and may be considered the gold standard². This procedure is not without complication. A review of the literature reveals there is no consensus defining patient factors that predict either patient’s success or complications.

Methods

Head and neck surgeons within our institution as well as Speech-Language Pathologists were surveyed about their clinical decision making used to select laryngectomy patients were are deemed good candidates for surgical voice restoration. Furthermore, Otolaryngology residents were surveyed prior to TEP related didactics as well as after training to determine if training on TEP-related complications impacted their clinical decision making.

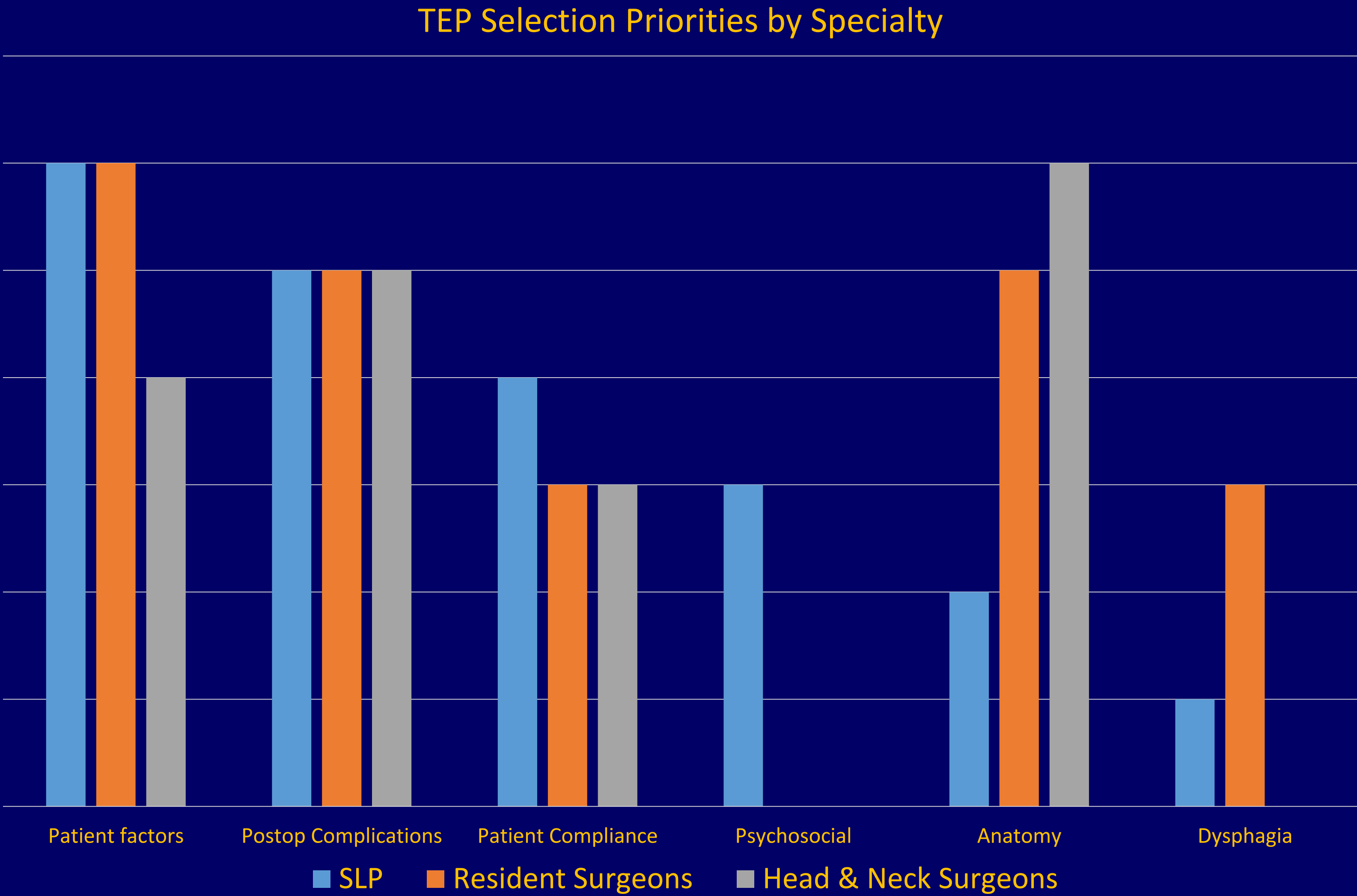
Participants were asked to rate different considerations for candidacy, rating them from extremely important to not important at all on a five point scale.

Considerations for TEP Candidacy
Swallow Function (i.e., dysphagia, dysmotility, stricture, spasm, reflux)
Anatomy (i.e., stoma size, extent of reconstruction, type of reconstruction, oromotor function)
Radiation History
Post-Operative Complications (i.e., fistula, poor wound healing, nutritional deficit)
Patient Compliance
Patient Factors (i.e., cognition, motivation, manual dexterity, vision, hearing, self-care)
Psychosocial Factors (i.e., family support, distance from medical center, financial resources)
Literacy
Respiratory Status (i.e., COPD, smoking status)
Substance Abuse
Medical Comorbidities (i.e., diabetes, thyroid function, pre-albumin)



Emory Head & Neck Surgeons Top Candidacy Considerations

- Anatomy (i.e., stoma size, extent and type of reconstruction, oromotor function)
- Post-Operative Complications (i.e., fistula, poor wound healing, stricture, nutrition deficit)
- Patient Factors (i.e., cognition, motivation, manual dexterity, vision, hearing, self-care)
- Patient Compliance



In conclusion, there are three observations from this study. First, the data showed that dysphagia was not reported as a top consideration in TEP puncture by either Speech Language Pathologists or Head and Neck Surgeons despite having significant implications on TEP management and is often a main consideration when managing TEP complications. In addition to surprisingly low consideration of dysphagia, there were other slight disparities between specialties. Both resident surgeons and Head & Neck Surgeons consider anatomy to be a main factor in determining candidacy, while Speech Language Pathologists are more likely to consider psychosocial factors. All three subject groups reported that patient factors (i.e., cognition, motivation, manual dexterity, vision, hearing, self-care), post-operative complications and patient compliance were key factors when selecting patients for TEP puncture. Lastly, while resident surgeons are novices in their fund of TEP knowledge, they did not differ remarkably from the Head and Neck Surgeons and Speech Language Pathologists. Also, residents responded well to training on TEP management and selection criteria.

Future plans include further exploration of surgeon attitudes regarding patient selection for TEP puncture. This analysis has allowed us to be much more thoughtful and precise in patient selection with the ultimate goal of reducing complications and improving post-laryngectomy voice rehabilitation.

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1. American Cancer Society, <https://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/key-statistics.html>
2. Smith, A.S., Thimmappa, V, Jones, J, Shires, C, Sebelik, M (2017). Use of Ultrasound for Sizing Tracheoesophageal Puncture Prostheses. *Otolaryngology-Head and Neck Surgery*, 157 (6), 1075-1078.