

# The Importance of Preoperative Counseling for Laryngectomy Surgery: A Tale of Two Laryngectomees

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#### Introduction

- Total Laryngectomy is a rare procedure in which the larynx is removed
- 10,270 people in the U.S currently live with a laryngectomy (American Cancer Society, 2004).
- Significant impact and potentially devastating effects on patients (McColl et al., 2006).
  - impacts the functions of swallowing, breathing, and speaking

This case study will demonstrate the clinical course of two laryngectomy patients, highlighting the assessment, education, and treatment interventions by the speech-language pathologist at each level of care.

### Objectives

- Compare and contrast the clinical pathway of two patients with laryngectomees
- Outline the importance of speechlanguage pathology services at each level of care (pre-operative, postoperative and outpatient care).

#### References

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Keith, R. L., Linebaugh, C. W., & Cox, B. G. (1978). *Presurgical counseling needs of laryngectomees: A survey of 78 patients. Laryngoscope, 88, 1660–1665.* 

McColl, D, Hooper, A, & Von Berg, S (Fall 2006), Preoperative Counseling in Laryngectomy, *Contemporary Issues in Communication Science and Disorders, Volume 33. 147-151*)

## Speech-Language Pathology throughout the continuum

## Pre-operative Counseling

Acute setting
(Post-operative status/post Laryngectomy)

Outpatient
(s/p Hospital
Discharge)

#### Resources:

- Local support groups
- Communication options after surgery: electrolarynx, alternative communication, tracheoesophageal Prosthesis

#### SLP intervention focus:

- Assess current communication
- Tracheostomy care
- Equipment and supplies
- Expectations with future appointments
- Warm hand-off/Introduction to SLP following post-surgery during acute stay

#### Education:

- Changes in anatomy/physiology that impact speech, swallowing and breathing
- "Neck Breather"
- Communication options

#### SLP intervention focus:

- Provide alternative communication training
- Assess swallowing function
- Laryngectomy care
- Equipment and supplies
- Training of RN, patients, and families on Laryngectomy care
- Hand-off between SLP and ENT

#### Education:

- Changes in anatomy/physiology that impact speech, swallowing and breathing
- "Neck Breather"
- Communication options







#### SLP intervention focus:

- Assess swallowing, diet recommendations and swallowing strategies.
- Assess communication needs to include training of TE (Tracheoesophageal) speech, electrolarynx, alternative communication needs, and/or esophageal speech.
- Tracheostomy care review
- Equipment and supplies: ensure that supplies have been ordered and received

#### Education:

- Changes in anatomy/physiology that impact speech, swallowing and breathing
- Review resources

Conclusion The Speech-Language Pathologist prepares the patient to reach optimal communication and swallowing function to gain maximal benefit and recovery from laryngectomy surgery. These case studies demonstrate the importance of preoperative counseling and speech-language pathologist roles and responsibilities at each level of care resulting in improvement of functional status, safety, and reintegration into the community.



## Patient 1 - A Tale of Two Laryngectomees

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History: 85 y/o male with a history of laryngeal squamous cell carcinoma s/p radiation therapy. Laryngectomy from a local hospital in Los Angeles 04/3/21; no pre-operative counseling. Post-operative course complicated by laryngectomy fistula, s/p G-tube placement on 04/5/21. Pt was transferred to Cedars-Sinai Medical Center (CSMC) for evaluation and treatment of laryngectomy fistula.

Patient 1	Pre-operative Counseling	Acute Setting	Outpatient
Communication	NONE	Electrolarynx ordered. Communication board and writing aid issued. Pt continued to utilize gestures and lip-reading during admission leading to frustration and communication break downs between the patient and family/ healthcare providers.	Post-operative follow-up visiton 07/01/21. Equipment education completed. Extensive education and review of equipment and supplies  Secondary tracheoesophageal prosthesis (TEP) placement scheduled for 07/26/21 but canceled as patient and family were overwhelmed and felt they needed more education on TEP.
			Word level with electrolarynx on 07/01/21; Sentence level on 09/14/21 due to inconsistent practice, and Conversation level on 09/28/21
Swallow		G-tube placed 04/05/21.Leak test completed on 04/29/21 and Fistula found. DC from the hospital on 05/22/21- NPO due to fistula	05/26/21 Repeat Leak test completed - no fistula found; patient placed on a full-liquid diet. 07/01/21 first outpatient follow up visit; diet of Regular/Easy to Chew and Thin liquids working towards G-Tube removal with dietician.
Education and Training	The role of the SLP was mainly family education	Review of changes in anatomy/physiology that impact speech, swallowing, and breathing. Education regarding supplies (HME's, Larytube, etc.) to include use and purpose of equipment to prevent mucous plugging, cleaning equipment, and completed necessary paperwork regarding prescription for Laryngectomy supplies. Outpatient speech therapy order obtained and follow up visit was scheduled for follow up.	
		Patient's care complicated by delirium while in the hospital. Patient was unable to participate in laryngectomy care.  Training: Education with medical team (RN, Hospitalist, CNA, etc.) regarding rescue breathing, supplies, and communication.	

Current Status: Pt lives with wife and continues to require cues to utilize his electrolarynx. Pt practices daily with his electrolarynx. Continues to require assistance from son and wife for care of stoma and equipment.



## Patient 2 - A Tale of Two Laryngectomees

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History: 65 y/o female initially with squamous cell carcinoma of the hypopharynx treated with concurrent chemoradiation therapy in 2012. Pt noted to have a supraglottic recurrence. She underwent induction docetaxel/cisplatin/5 fluorouracil (TPF) followed by irradiation completed in 2020; trial with immunotherapy. Recurrence 2021, and laryngectomy completed on March 15, 2021

Patient 2	Pre-operative Counseling	Acute Setting	Outpatient
Communication	Pt completed 2 sessions. Education completed, introduction to the acute SLP and social worker who will provide services in the hospital. Equipment and supplies reviewed. Provided resource for local laryngectomy support group to develop a support system.	able to communicate immediately independently after surgery with	Post-operative follow up 04/14/21: Independent with care of supplies and understanding of equipment. Pt was communicating independently with family, friends, and healthcare providers utilizing a writing tablet.
			Secondary TEP placement completed on 06/30/21. Independent with communication at the conversation level at 80-90% accuracy to an unfamiliar listener on 7/15/21.
			09/14/21 began with hands free device and is independent with communication
Swallow			04/14/21 -Diet: Regular/Easy to Chew and Thin liquids; weight maintained no difficulty with swallowing.
Education and Training		Review of changes in anatomy/physiology that impact speech, swallowing, and breathing. Education regarding supplies (heat moisture exchange (HME), Larytube, etc.) to include use and purpose of equipment to prevent mucous plugging, cleaning, and follow up regarding prescription and supply. Pt was independent with use and cleaning of supplies prior to discharge. Reviewed outpatient appointments for follow up with outpatient therapist. Training: Education with medical team regarding rescue breathing, supplies, and communication.	

Current Status: Pt lives alone with family members who check in on her frequently. She is independent with management of her laryngectomy supplies, communication, and other ADL (driving, bathing, etc.). She also provides support to other patients as part of the medical center's Head and Neck team.