# 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 speech-language pathology services at each level of care (pre-operative, post-operative and outpatient care).  

## Speech-Language Pathology throughout the continuum

### Pre-operative Counseling

**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

### Acute setting (Post-operative status/post Laryngectomy)

**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

### Outpatient (s/p Hospital Discharge)

**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.

## References

Contact author: Douglas McColl, 400 W. 1st St  

**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.

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<thead>
<tr>
<th>Patient 1</th>
<th>Pre-operative Counseling</th>
<th>Acute Setting</th>
<th>Outpatient</th>
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<tbody>
<tr>
<td><strong>Communication</strong></td>
<td>NONE</td>
<td>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.</td>
<td>Post-operative follow-up visit on 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.</td>
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<tr>
<td><strong>Swallow</strong></td>
<td>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</td>
<td>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.</td>
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<tr>
<td><strong>Education and Training</strong></td>
<td></td>
<td>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.</td>
<td>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.</td>
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*The role of the SLP was mainly family education*

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.
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

<table>
<thead>
<tr>
<th>Patient 2</th>
<th>Pre-operative Counseling</th>
<th>Acute Setting</th>
<th>Outpatient</th>
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</thead>
<tbody>
<tr>
<td>Communication</td>
<td>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.</td>
<td>Admitted to hospital with writing aid (texting, notepad and pen) was able to communicate immediately independently after surgery with healthcare professionals and family. Attempted Electrolarynx training; however, patient refused. 04/07/21: Family and pt caregiver education completed. Discharged from hospital on 4/9/21 at independent level of care, use, and understanding of laryngectomy equipment.</td>
<td>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.</td>
</tr>
<tr>
<td>Swallow</td>
<td></td>
<td>Leak study completed on 04/03/21 -adequate oral acceptance and anterior-posterior transit. Contrast passes through neopharynx and esophagus. Patient noted to have build up on contrast on the right side anterior to neopharynx; questionable diverticulum. Contrast did not leak into trachea. 04/05/21: Clear liquid diet. Repeat leak study completed on 04/06/21: build up of contrast on the right side anterior to neopharynx. Defer to MD for diet advancement. 04/06/21: Pt placed on puree thin liquids after MD review of leak study; 04/09/21 advanced to soft solids and thin liquids. DC 4/9/21.</td>
<td>04/14/21 - Diet: Regular/Easy to Chew and Thin liquids; weight maintained no difficulty with swallowing.</td>
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<tr>
<td>Education and Training</td>
<td></td>
<td>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.</td>
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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.