

# Care of the Laryngectomy Patient

October 2017 Clinical Edition

## Laryngectomy Care

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**Know the type of Laryngectomy the patient has, Full or Partial!**

**Laryngectomy patients are Neck Breathers.**

**There are specific differences between a tracheostomy and laryngectomy patient**

### Types of Laryngectomy Surgeries:

Structures Removed	Structures Remaining	Postoperative Conditions
<b>Total Laryngectomy</b>		
Hyoid bone	Tongue	Loss of voice. Breathes through stoma. Full Neck Breather. Often some Problems Swallowing, they do not swallow the same.
Entire larynx (epiglottis, false cords, true cords, cricoid cartilage)	Pharyngeal walls	
Two or three rings of trachea	Lower trachea	
<b>Supraglottic or Horizontal laryngectomy</b>		
Hyoid bone	true vocal cords	Normal voice; occasional aspiration may occur with liquids; normal airway
Epiglottis	Cricoid cartilage	
False vocal cords	Trachea	
<b>Vertical (or Hemi) Laryngectomy</b>		
One true vocal cord	Epiglottis	Hoarse but serviceable voice, normal airway, no problem swallowing.
False cord	One false cord	
Arytenoid	One true cord	
One-half thyroid cartilage	Cricoid	
<b>Laryngofissure and Partial Laryngectomy</b>		
One vocal cord	All other structures	Hoarse but serviceable voice, occasionally almost normal voice; no airway problem; no swallowing problem
<b>Endoscopic Removal of Early Carcinoma</b>		
Part of one vocal cord	All other structures	Possibility of normal voice; no other problems

**Pre-op:** patient should state type of laryngectomy surgery and tube they have; a card may be with the patient. Make a copy for the chart.

**Post-op:**

- New laryngectomy: place patient on their side until awake then HOB 30 degrees.
- Humidified oxygen is placed via trach collar over the stoma
- Fresh stoma: care is similar to tracheostomy
- Position the person onto their side until awake to decrease aspiration risk. Expose the neck and remove clothing from the stoma area

**Airway emergency:** check neck for stoma, remove filter if present, and clear mucous from the stoma, raise shoulders, you should notice there is no larynx visible, and the neck is concave.

Remember, a Stoma is not the same as a Trach. Stoma means total separation of airway and only goes to the lungs.

- **TEP** Means, TracheoEsophageal Puncture
- Do not remove the stoma's housing unless it is blocking the airway.
- Do not remove the voice prosthesis. If it has come out, use 18fr Catheter [ might have to drop down to a 15fr if they have a 17fr TEP] and plug the TEP [hole], insert catheter several inches in, tie a knot in it near the end, and tape the catheter to the chest. Have X-Ray done to see if it has fallen into the Trachea or Esophagus. If it is in the Trachea, it needs to be removed.
- Lary- tube (outer & inner) may need to be removed to clear mucus plugs (use saline bullets) to force coughing and dislodge the plug as it can stop their breathing.
- If the Voice prosthesis is dislodged, Remove it and insert 18fr catheter into TEP hole to prevent aspiration and fistula closure, which can happen quickly, within a few hours.
- Note: I don't think you will have a Lary Tube, and a trach tube is not the same, and should not be used.
- Breathing? Look, listen, and feel over the stoma
- Wipe and suction. **Do not suction more than 6 seconds, and let them breathe. The suction also removes the oxygen from the lungs.**

**BLS: Basic life support**

- Use an infant/toddler mask 90 degrees to the stoma for a tight fit. **Neonatal mask works best.**
- A short, flexible tracheal tube should be used if **intubation** is needed **Tracheal tube is Not needed for a stoma to resuscitate.**
- Often difficult to detect a neck pulse due to radiation fibrosis, and it gets moved. Check closer to the center where the Larynx used to be. Check the femoral pulse.

- May only have one radial artery if used for free flap (no pulse on one side)
- Chest may fail to rise if their tube is blocked
- Air escapes from the mouth and nose in partial neck breathers [Trach]—**need to seal the mouth & nose** **No air goes through the mouth or nose with a Stoma, Full Laryngectomy.**

**Oxygen:**

- Small trach collar with humidified oxygen
- Communication may be impaired. Provide paper/pen to write messages or use a picture board
- **Do not refuse oxygen or tell the patient they don't need it. Also keep it above 92%**

**Laryngectomy patient care:**

<https://www.youtube.com/watch?v=oqj4f396Aaw>

**Changes in Swallowing :**

<http://www.practicalslpinfo.com/swallowing-after-laryngectomy.html>

## Communication during hospitalization

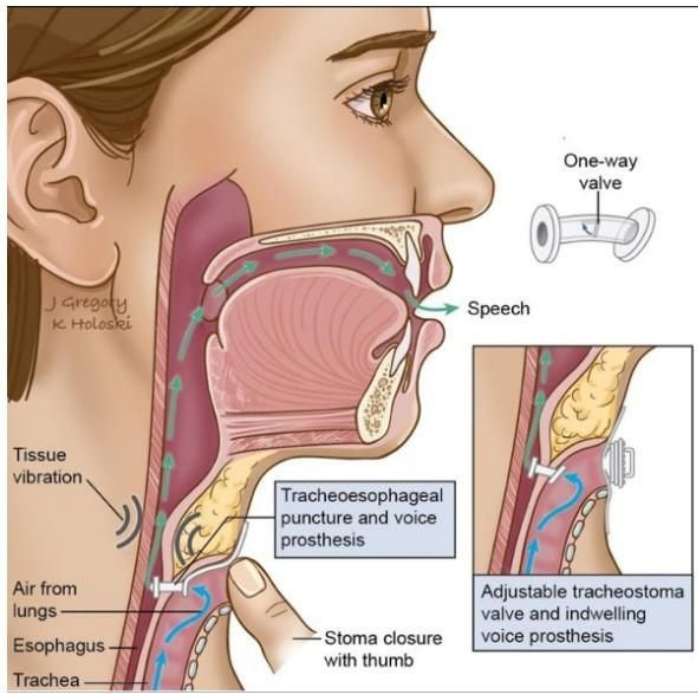
- ▶ Laryngectomees may have a voice prosthesis and/or an electro-larynx device
- ▶ The severely ill laryngectomee may have impaired communication or be too weak to constantly reach their neck to use their devices to speak.
- ▶ Be sure to have paper and pen at the bedside or a picture board for communication
- ▶ If they brought their supplies, keep them within reach so they can maintain their stoma and voice prosthesis
  - ▶ Laryngectomee supplies are patient specific and the hospital may not be equipped with everything they need

## Swallowing

- ▶ Laryngectomees rely on the tongue base and gravity to get food down the esophagus
- ▶ They must be in a completely upright (chair) position to eat, especially if tongue base movement is limited due to reconstruction
- ▶ A laryngectomee cannot choke since there is no connection to the trachea.

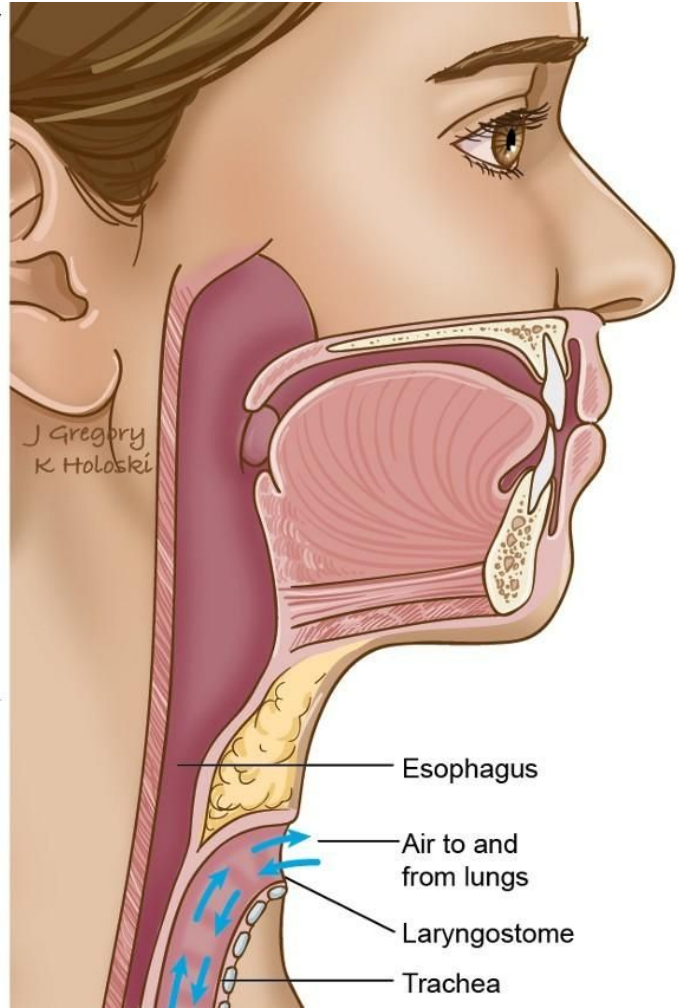
### Rescue breathing:

<https://www.youtube.com/watch?v=YE-n8cgl77Q>



**With TEP voice Prosthesis**

**WITHOUT TEP voice prosthesis**



### TEP Voice Prosthesis

### Showing HME Filter

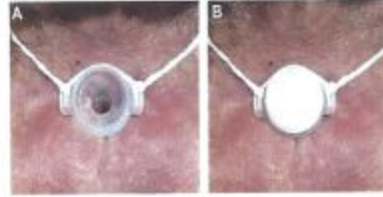


# Laryngectomy HME devices



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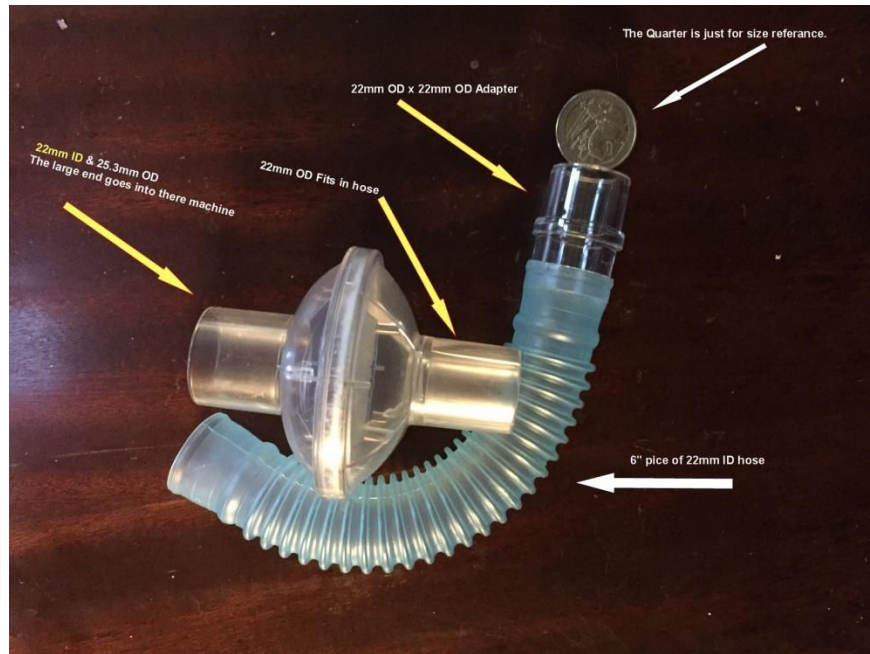
A: LaryTube B: with HME (Provox) cover



Researchgate.net

**Parts to hook up to the Anesthesiology equipment, if you use a baseplate or Lary button. Remember they need air with the oxygen. All parts are in Pulmonary dept. Hose can be 6", 12", or 18"**

**You can also use an Infant Mask over the Stoma at 90 degrees**



All parts should be available in the Pulmonary Department of Hospital.



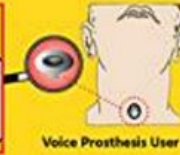
## Tracheostomy v/s Laryngectomy

Tracheostomy	Laryngectomy
A hole is created into the trachea through an incision through the neck	Complete removal of the larynx with redirection of trachea
Mainly used to treat airway obstruction. Person can breathe via nose/mouth	Used to treat cancer of the larynx. Person now breathes through a 'stoma'
Speech through speaking valve. Normal sounding. No changes in voice.	Speech is never 'normal' again. Possible through TEP or electrolarynx.
Changes are usually temporary.	Changes are permanent & irreversible.



# EMERGENCY

**Total Neck Breather - No Vocal Cords!**



Voice Prosthesis User

**For Medical Professionals Only:** Intubate carefully using a small size ET tube (size #5 or #6) without dislodging the voice prosthesis.

**Total Neck Breather - No Vocal Cords!**



Voice Prosthesis

**For Medical Professionals Only:** If prosthesis is accidentally removed, replace immediately with a 22.5Fr all purpose catheter to prevent choking/aspiration.

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