

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 |
|--|----------------------|--|
| Total Laryngectomy | | |
| 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 | |
| Supraglottic or Horizontal laryngectomy | | |
| Hyoid bone | true vocal cords | Normal voice; occasional aspiration may occur with liquids; normal airway |
| Epiglottis | Cricoid cartilage | |
| False vocal cords | Trachea | |
| Vertical (or Hemi) Laryngectomy | | |
| 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 | |
| Laryngofissure and Partial Laryngectomy | | |
| One vocal cord | All other structures | Hoarse but serviceable voice, occasionally almost normal voice; no airway problem; no swallowing problem |
| Endoscopic Removal of Early Carcinoma | | |
| 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

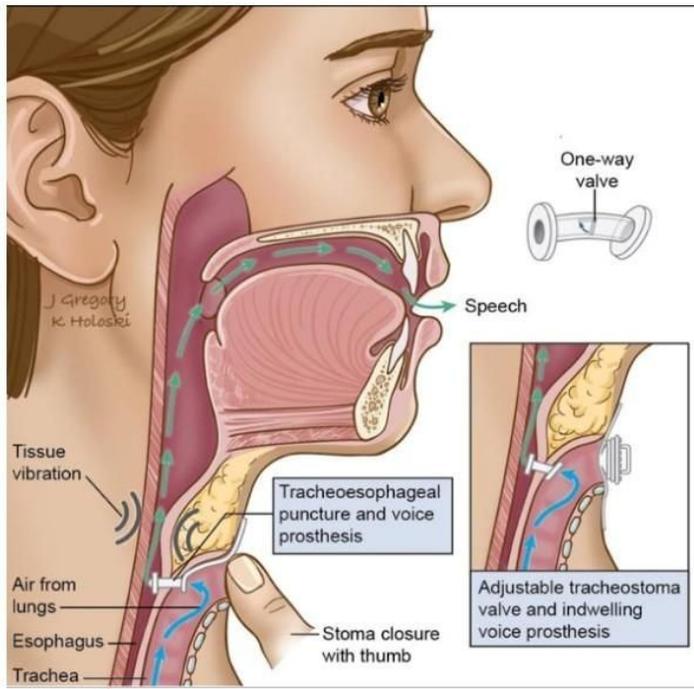
- ▶ Laryngectomees may have a voice prosthesis and/or an electro-larynx device
- ▶ The severely ill laryngectomee may have impaired communication or be too weak to constantly reach their neck to use their devices to speak.
- ▶ Be sure to have paper and pen at the bedside or a picture board for communication
- ▶ 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.

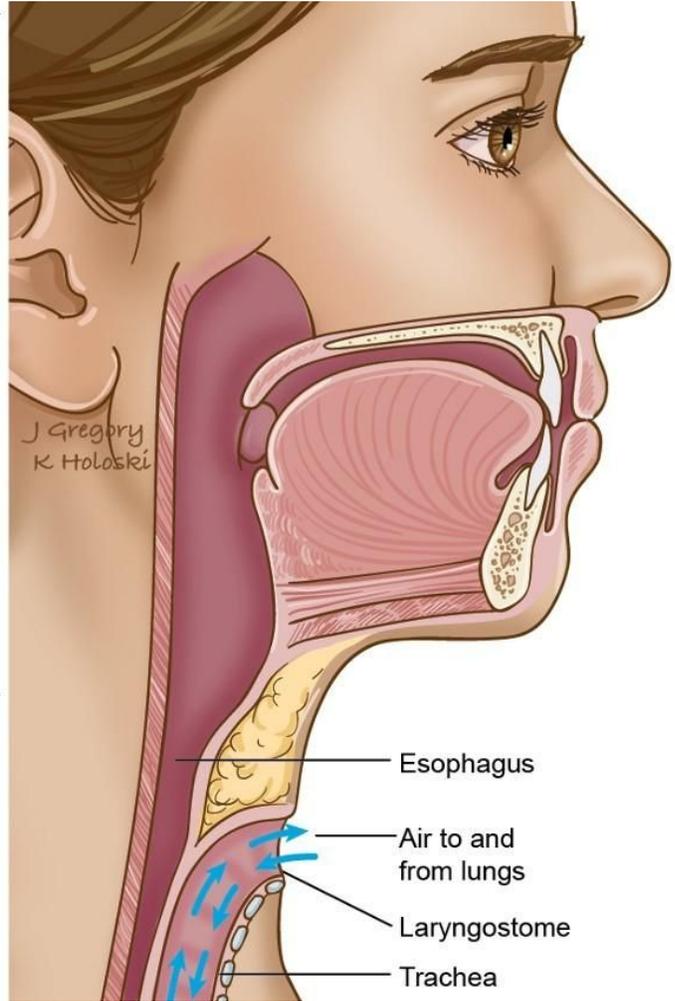
Rescue breathing:

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



With TEP voice Prosthesis

WITHOUT TEP voice prosthesis

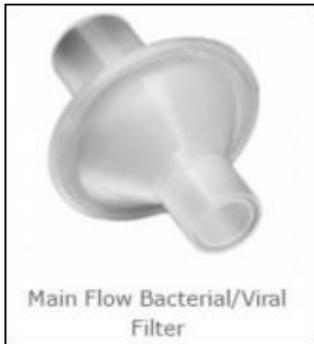


TEP Voice Prosthesis

Showing HME Filter



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

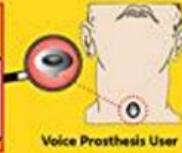


Tracheostomy v/s Laryngectomy

| 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

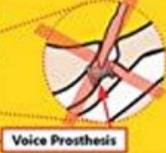
Total Neck Breather - No Vocal Cords!



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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Your voice

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