Laryngectomy Education
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Objectives
- Laryngectomy
- Differences between laryngectomy and tracheostomy
- Basic care for a laryngectomy patient
- Emergent situations with a laryngectomy patient

The Larynx
- "Voice Box"
- Two bands of muscles (vocal cords)
- Breathing, talking, and swallowing

What Is It?
- Removal of the larynx
- No more connection between trachea and upper airway
- "neck breathers"
- Opening is called stoma
- Stoma typically will remain open with the help from the "lary tube"
Total: entire larynx is removed
Partial: only portion of the larynx is removed
Dependent on where the cancer or affected area is

Cancer of the larynx
Most common cause of cancer from smoking
Metastasize to major body parts
Tumors
Failed radiation/chemo therapy

Redirection of airflow
Esophagus is redirected (minimal aspiration risk)
Decreased saliva production
No peristalsis during swallow
Smell and taste is affected
Unstable mass
Unstable ICP
Risk vs. benefits

Performed by Theodor Billroth in Vienna 1873
36 year old with a subglottic tumor
Data was published in 1874 to the German Surgical Society

Laryngeal Cancer represents 0.8% of all new cancer cases in the U.S.
Why are we seeing more?
How many are we expecting?
What are hospitals doing?

**Laryngectomy**
- Redirection of the trachea
- Used to treat cancer of the larynx
- Can only breathe through the stoma
- Lifestyle is dramatically changed
- Communication will forever be different

**Tracheostomy**
- Mainly to treat airway obstruction
- Needing mechanical ventilation (continuous or partial)
- May be able to speak with normal voice
- Changes may be temporary

**Laryngectomy vs. Tracheostomy**

**Cuffed vs. cuff-less tracheostomy tube**
- The purpose of the cuff is to allow for positive pressure ventilation
- Laryngectomy patient may use tracheostomy tube to provide ventilation
**Passy-Muir Valve (PMV)**
- One way valve
- Great for communication on tracheostomy patients
- Do not use on laryngectomy patients

**Lary Tubes**
- Silicone
- Patent stoma (cleanliness)
- Can house the HME
- Removed and clean preferably twice a day
- Identifies the laryngectomy patient

**HMEs**
- Heat & Moisture Exchanger
- Upper airway no longer humidifies
- Barrier to airways
- Should be replaced daily
- Do not wet (do not use HME when using aerosol humidification)
Patient may not need the lary tube
Base plate will house HME

Promotes proper function of cilia
Nose no longer filters or humidifies the air
Other factors that affect the cilia

Room humidifier
Saline sprays or bullets down the stoma
Drinking plenty of water

Keep stoma clean
Aerosol humidification when HME not in use
If skin is red or irritated, avoid placing accessories on stoma
Use saline (limit chemicals)
**Cleaning the lary tube**
- Should be cleaned at least twice a day and PRN
- Avoid harsh chemicals
- Rinse with water
- Air dry

**Oxygen for the laryngectomy patient**
- Usually oxygenate with aerosolized trach-mask
- If needing ventilation at home, a tracheostomy tube may be used

**Mobilizing**
- Are the vitals within normal limits?
- Can the patient follow commands?
- Can the patient spontaneously breathe without issue?
- Does the patient need supplemental oxygen?

**Suctioning**
- Use hospital policy and suction airway to clear secretions
- Direct access to trachea
Self-Care at Home
- Keep stoma clean and dry
- Avoid thin paper towels
- Avoid chemical sprays
- Use of a mirror when cleaning
- May use normal saline misting spray to hydrate

Care post surgery
- Post surgery takes about 10 days to recover
- Smoking cessation
- Avoid alcohol
- Speak to your doctor about medications that can affect your healing process

Care at home
- Recommend the use of a medical bracelet
- Keep emergency contact information at hand
- Smell is affected
- Check smoke alarms regularly

Home Accessories
Communication after laryngectomy

- Writing
- Typing
- Text to Speech Applications
- Sign language
- Electrolarynx
- Traheo-esophageal prosthesis (TEP)

Tracheoesophageal Prosthesis (TEP)

- One way valve which allows air to be pushed up from the lungs to pass from the trachea and enter the esophagus
- Stoma must be occluded to voice
- Simple procedure where the clinician punctures the area and fits the device in the opening

Complications of TEP

- Bleeding
- Edema
- Infection
- Possibility of dislodgement

Cleaning the TEP
Nasogastric feeding tube is usually placed at the time of the procedure.
Usually stays in place for about 7-10 days.

- Patients can still eat and swallow food
- Usually after incisions heal and no presence of a fistula
- Practice
- Minimal choking risk
- Can go back to “normal diet”

Education to patient
Rehabilitation to new lifestyle
TEP care and education
Family education and resources
Emergency In-patient situations

- Upper airway no longer functions!
- Only airway access is through stoma

Help and Support

Closing remarks

Saving lives, one breath at a time . . .

Bean, The first laryngectomy canine