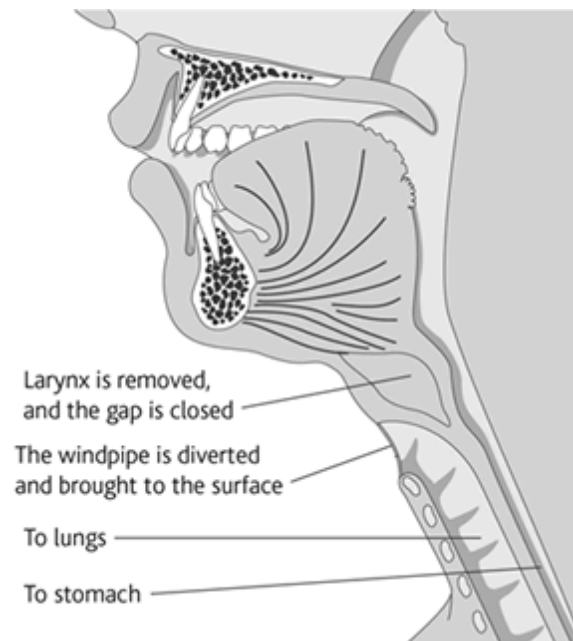


LARYNGECTOMY GUIDE-BOOK

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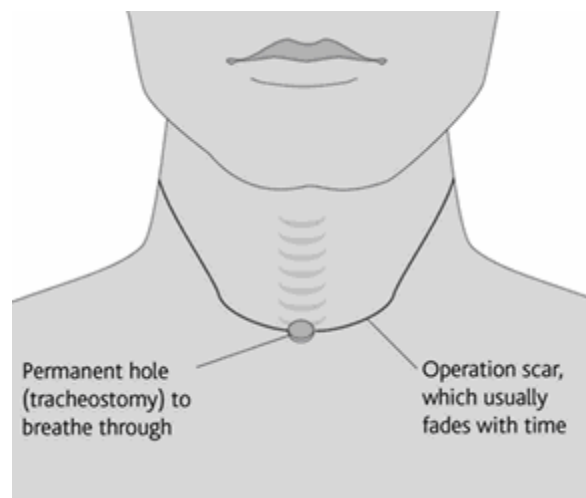
Tell me something about laryngectomy

The larynx also called the voice-box gives us our voice and also keeps foreign material out of our lungs. Total laryngectomy is a surgery to remove the entire larynx, usually because of cancer. People who have had a laryngectomy are referred to as laryngectomees. After the operation, there is no longer any connection between the lungs and the mouth and nose. The trachea or the wind-pipe that connects the back of the throat to the lungs is brought out onto the neck to form a permanent hole through which the patient breathes. This is now called a stoma, is permanent and allows air to enter the lungs. Now a person cannot breathe in or out through their mouth or nose after surgery. However, the continuity of the eating passage is re-established as before.



What to expect immediately after a laryngectomy

In the first few days after surgery, you will have drains, which were placed under the skin to collect fluid from the neck and help heal the wound. The drains are removed before you go home. To give medicines and fluid you will have intravenous (IV) lines. Immediately after the operation the stoma may need to be held open by a tracheostomy tube while it heals. In time, the stoma will stay open without the tube, however it is common for the tracheostomy tubes to be used for the first few days or weeks. You will be shown how to keep the tube clean and replace it if necessary. You will breathe and cough through the tracheostomy.



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While you are healing, you may not be able to swallow food or liquids. In order to keep you fed a small plastic feeding tube will be placed into the stomach through the nose. If all goes well, you will be able to start swallowing 5 to 7 days after surgery and the feeding tube can be removed.

Most patients go home 5 to 7 days after surgery. A different way of communicating may be used after surgery, such as mouthing, writing with pen, using a slate, gesturing or pointing.

Speech restoration after a laryngectomy

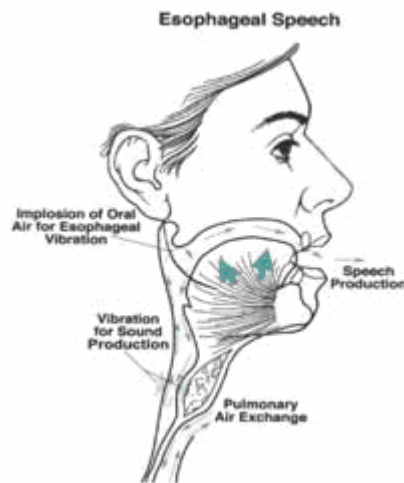
Not being able to speak is a great loss for anyone who has had a laryngectomy. It can take a long time for you and your family and friends to adjust to this change. Losing your voice box to cancer

no longer means losing your ability to talk. Learning to speak again will take time and effort. You will need to see a speech therapist who is trained in the rehabilitation of people who have had a laryngectomy. The speech therapist will play a major role in helping you to learn to speak.

There are several methods to help people with a laryngectomy to produce sound and learn to speak again. A speech and language therapist will usually visit you before your operation to discuss the different ways of communicating. You may also be able to meet someone who has had similar surgery or watch videos of people talking after they have had a laryngectomy. Some people find this very helpful, while other people prefer to have written information. The method of speech you can use will depend on the type of surgery you have and on your individual circumstances, such as the type of work you do and what you yourself prefer. There are three basic ways. Each one has benefits and drawbacks.

Oesophageal Speech:

Oesophageal speech is one of the oldest methods of speech restoration and is often considered the second tier. In this method with training, some patients can swallow air and force it through their mouth. As the air passes through the throat it will cause sound vibrations which, with training, people can turn into speech with the tongue, lips, teeth and palate, as do normal speakers. This is the most basic form of speech rehabilitation and the whole process is similar to a controlled belch or burp. With the advent of new devices and surgical techniques, learning oesophageal speech which can be difficult, is often not necessary.



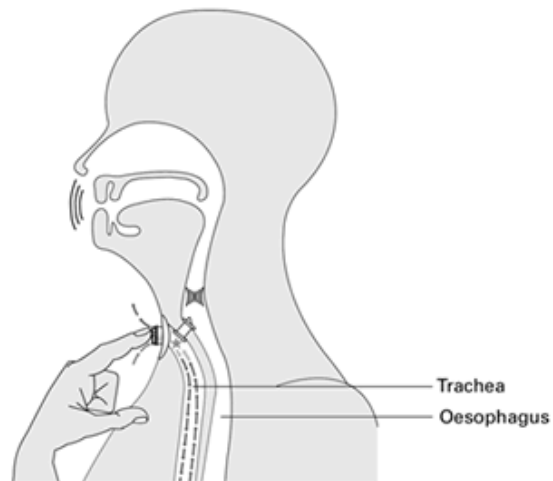
Benefits: it is cheap as it does not require instruments or a procedure, and does not require using your hands

Drawbacks: difficult to hear and comprehend, hard to learn and inferior to TO voice

Tracheoesophageal (TO or TE) voice:

TO or TE voice using a voice valve or prosthesis is the most common way that surgeons try to restore speech and is considered the 'gold standard' amongst all methods of voice restoration. This method requires a puncture called tracheoesophageal puncture and is done either at the time of surgery or later. This procedure involves creating a connection between the windpipe and food pipe through a small puncture or hole at the stoma site. A small one-way shunt valve placed into this puncture restores your ability to force air from the lungs into the mouth. After this operation, you can cover your stoma with a finger during expiration to force air out of your mouth, producing sustained speech. Movements of your lips, cheeks and tongue help shape the sound into words.

This takes little practice, but after surgery you can work closely with speech pathologists to learn and master this rather easy technique. The valve also prevents food and fluids from passing into the windpipe. It may take a while however to completely master the ability to speak with a voice prosthesis. The voice can sound quite natural and is of reasonable loudness and fluency, although in women it is usually a lower pitch than before the operation.



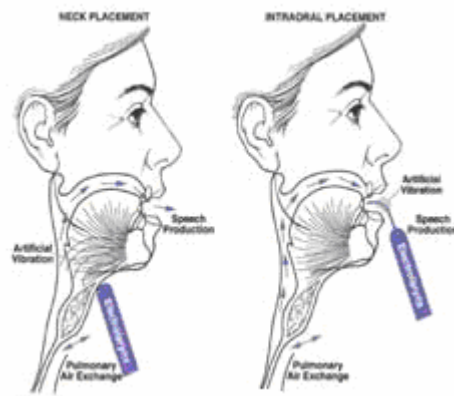
There are several types of valve available today. The most common examples are Provox, Blom-Singer and Groningen valves. Some types are completely within the stoma and are known as in-dwelling valves. They can be changed only by a doctor or speech therapist. Others (ex-dwelling) have a strap outside the stoma and can be changed by you or your relative. There are benefits and disadvantages of each type and these should be discussed with you by a doctor or speech and language therapist.

Benefits: good voice, high success rate, easily learnt and closer to normal speech than other methods

Drawbacks: needs to be cared for every day, valve needs to be changed due to wear and tear, needs the use of your finger to block the stoma (unless you use a hands-free device).

Electromechanical Speech:

This is again an old method of voice restoration and is often used if the other methods are not possible. Several types of electronic aids are now available to help produce a voice if you cannot have a puncture and a valve because of certain medical reasons, or while you are learning to use your valve voice. It involves the use of a battery operated tool that is placed against the skin of the neck or into the mouth. The tool vibrates the air and by moving your mouth and tongue, you can then convert this sound into words.



Benefits: It is easy to learn and master

Drawbacks: expensive, the sound is mechanical or robot sounding and needs use of a hand always.

Other activities after laryngectomy

As you heal you will begin to be able to perform many of the activities that you did before your surgery.

Eating

After surgery, at first you may not be able to swallow easily and may need extra nutrition. In this case, the doctor will put a feeding tube into your stomach for you to use while you are recovering. As you heal you will be better able to eat and drink as before. However it is advisable to reduce the size of the feeds, avoid very dry fruits/nuts and large portions.

Smell and taste

After a total laryngectomy, you cannot breathe through your nose and mouth and may lose your sense of smell. After a few months, your sense of smell may improve to some extent. You may be able to have some sense of smell by learning the 'polite yawning technique', where you yawn with closed lips. This draws air in through the nose, allowing you to smell. It can also improve your sense of taste. Your speech and language therapist may be able to teach you how to do this.

Bathing

Avoid splashing water into your stoma. If any water enters your stoma it will make you cough. You may take a shower, if you are careful not to allow water to enter the stoma. Aim the showerhead at your lower body or back. It is best to cover the stoma with a waterproof bib or a shower aid that keeps the water out and allows you to keep breathing.

Clothing

You can wear any kind of clothes that are loose around the neck. You may wish to wear a scarf, a turtleneck sweater or a bib made especially as a stoma cover.

Stoma Care Following Total Laryngectomy

Having a stoma instead of a larynx means that the air you breathe in and out will not pass through your nose or mouth. As air passes normally through the nose or mouth, it is humidified, warmed and filtered (dust and other particles are removed). After a laryngectomy and tracheostomy, the air reaching the lungs will be dryer and cooler. This may irritate the lining of the breathing tubes and cause thick or crusty mucus to accumulate. Small devices known as stoma filters are now available that can help reduce these secretions. They are known as heat and moisture exchangers (HMEs). These can be attached over the stoma or put onto the tracheostomy tube to warm and moisturise the air. HMEs can reduce the production of sputum and help to prevent coughing and chest infections.

You should also learn how to take care of your stoma (periodic suctioning, cleaning and use of a humidifier) by yourself. Your doctors, nurses and other health care professionals can teach you how to care for and protect your stoma, which includes precautions to keep water or small particles from falling into the windpipe.

Chest infection

A stoma can make you more likely to get chest infections. If you notice any change in the colour of your sputum or have a cough that does not go away, it is important to report it to your doctor straight away.

Hands-free valves

These devices allow people using a voice valve or prosthesis to speak without needing to cover the stoma with a finger. These are known as hands-free valves or automatic tracheostoma valves (ATVs). They are not suitable for everyone, but you could ask your doctor or speech and language therapist whether they would be appropriate in your case.

Follow-up after treatment for laryngeal cancer

Patients with cancer of the larynx and hypopharynx are at life-long risk for developing recurrences or new cancers in the head and neck area. Therefore, they must be observed closely after treatment. The health care team will decide which tests should be done and how often based on the patient's initial stage, type of treatment chosen and response to that treatment. These will often continue for

several years. If you have any problems or notice any new symptoms in between appointments, let your doctor know as soon as possible.

Smoking and Alcohol Use

Two of the things that may cause cancer of the larynx are smoking and alcohol. If you smoke or drink, it is very important to quit so as reducing your chance of developing a new cancer. It can also help improve your appetite and your overall health. Other smoking-related cancers such as lung and oral cancers often occur in these people as well. For this reason, it is very important that people with cancers of the larynx and hypopharynx understand the value of follow-up examinations for the rest of their lives and of avoiding risk factors like smoking and drinking.