



Total Laryngectomy

A Total Laryngectomy is a confronting and major operation to remove the voice box. This is almost always performed to treat an advanced laryngeal cancer which has been deemed by a multi-disciplinary group of head and neck cancer clinicians to be unsuitable for primary treatment with chemo-radiotherapy, or a cancer that has recurred/persisted after prior radiotherapy. It is hard to come to terms with losing your voice box. It is critical however to stress that while life will irreversibly change after this surgery, you can still live a full and rewarding life once once rehabilitated after the procedure.

The Operation

This procedure takes approximately 4 hours. A large U shaped incision is made from ear to ear, and this also allows for access to the lymph nodes of the neck which are usually dissected at the same time as your Laryngectomy. After the larynx is removed the trachea is fashioned into a 'stoma' in the midline lower neck. The defect inside the throat where the larynx once was is stitched closed in a water-tight fashion. Often half of the thyroid will be removed with the larynx, particularly if your tumour comes close to this gland. A speaking valve is inserted between the back wall of the trachea and the front wall of the oesophagus, and a feeding tube is placed thru the nose (unless you already have a PEG tube). I place two drain tubes in the wound to evacuate any fluid that can accumulate in the wound bed.

The Typical Recovery

You will wake from surgery in the Intensive care unit and remain there overnight, usually going to the ward on either the first or second post operative day. The recovery from a Laryngectomy takes about 2-3 weeks in hospital, and will continue for many months after going home as you accommodate to your new anatomical setup. Both myself, and a speech-language therapist will play an integral role in this process of education and trouble shooting the small problems that invariably occur when learning how to care for your stoma and use your speech valve.

The first week in hospital is tough - you will have an IV drip, multiple drain tubes in the neck, a urinary catheter for the first few days, and you will feel flat, lethargic, frustrated and sleep deprived. There will be daily blood tests for the first 5 days. I like you to sit out in a chair by the second day post operatively and you will be assisted by the ward staff to do this. Your lungs will feel irritable and you will

cough frequently. The lungs are used to the nose humidifying and warming the air you breathe, and in these first few weeks despite us delivering warm humidified air to your stoma via a small 'trache shield' around your neck, your chest will produce an increased volume of thin mucous. Communication is tough and frustration or even anger is common. You will be provided with a whiteboard, however if you have an iPad or smartphone to bring in this can be useful.

During the second week you will start making progress. Drain tubes come out, IV medications stop, you will be much more mobile and hopefully walking around the ward.

I typically start you drinking clear fluids on day 8 and slowly progress you to a soft diet by 2 weeks. If however you have had radiotherapy I delay the onset of drinking fluids until the 2 week mark as the inside of the throat doesn't heal as well in these cases.

The final phase of the recovery is the education phase. Individuals vary hugely in their ability to cope after Laryngectomy. Factors such as eyesight and dexterity play a large role, as does the level of support you have at home and your motivation and cognitive function. Prior to going home you will need to demonstrate your independence in caring for and cleaning your stoma, and your independence in maintaining an adequate caloric intake in your diet. Having a small LED lighted portable mirror to keep your hands free to allow you clean your stoma is helpful and I'd recommend you or your family purchase one prior to coming to hospital. Learning how to use your speaking valve is something to turn your attention to after discharge. Elderly or frail patients may require a period of rehabilitation prior to being safe for discharge home.

You should plan for 3-6 months off work in my opinion (depending on the need for post operative radiotherapy) *Please ask for a medical certificate if needed, or if you have income protection please provide me with any relevant forms.*

Pre and Post Op Diet

Before your surgery it is critical to maintain good nutrition to maximise your healing. Of most relevance are high protein foods such as meat, fish, cheeses, beans, yoghurts, nuts etc. Meal replacement drinks like sustagen can be of use to bolster your energy intake in preparation.

Post Op Complications:

Every patient has difficulties and minor setbacks throughout the recovery from a Total Laryngectomy. Myself, the nursing staff and speech therapy staff will remain vigilant to this and help you through these as they arise. Life-threatening complications are rare.

Common issues early on are salivary fistula, mucous plugging, lymphoedema of the skin above the incision line and swelling and narrowing the tracheostoma.

Uncommon issues are wound infections, wound hematomas or seromas, or general medical problems such as chest infections, deep vein thrombosis, problems with fluid balance or anaemia requiring transfusion. If these latter issues arise I will arrange for a physician to oversee some parts of your care.



Mr Nicholas Agar

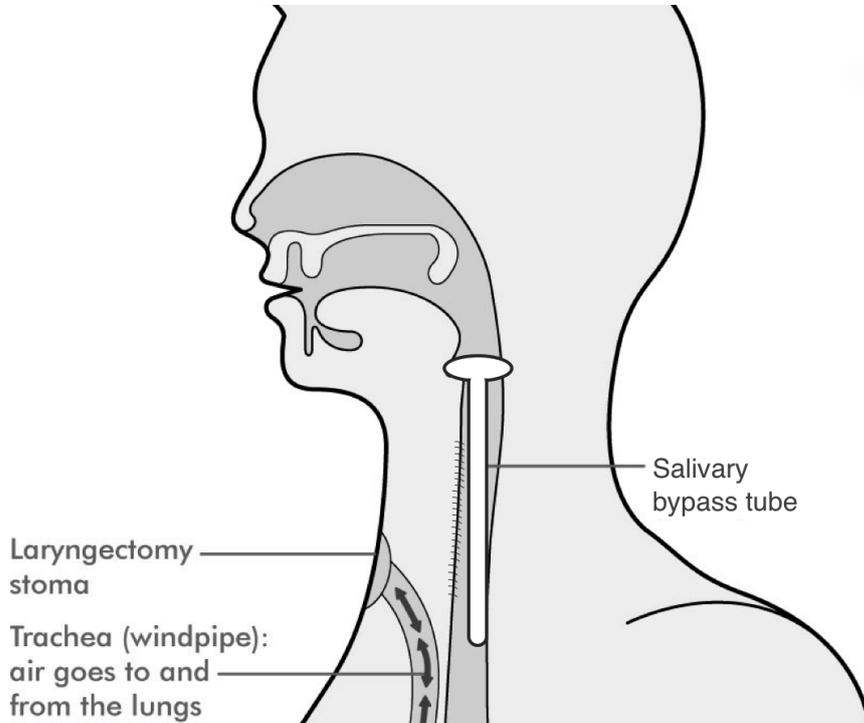
GEELONG
Head and Neck

Total Laryngectomy



Trache Shield

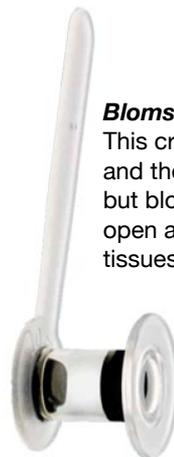
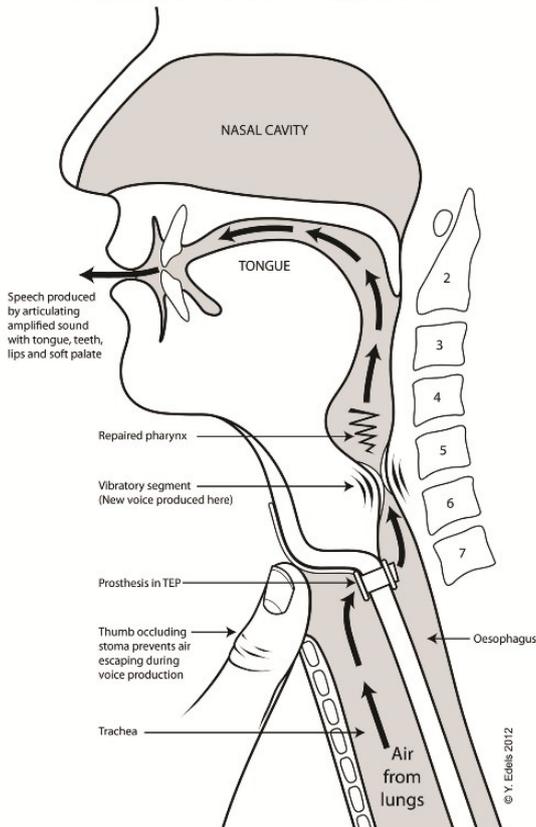
Will sit loosely around your neck to deliver warm humidified air to your stoma to prevent drying and or deliver oxygen if required.



Laryngectomy tube or 'Bivona'

This small plastic tube will sit in the opening of your stoma for the first few weeks while it is healing to ensure it heals in a nice open manner and to prevent major crusting around the stoma.

Surgical Voice Production - Digital Occlusion



Blomsinger Valve, Speaking Valve, or Voice Prosthesis

This creates a controlled link between the back of the stoma and the lumen of your oesophagus. When you breathe out but block the stoma the air pressure will force the valve open and the air will come out your mouth, vibrating the tissues of the throat in the process and creating a voice.



Mr Nicholas Agar

GEELONG
Head and Neck

Total Laryngectomy post op problems

Every patient has difficulties and minor setbacks throughout the recovery from a Total Laryngectomy. My registrars (trainee surgeons), myself, the nursing staff and speech therapy staff will help you through these as they arise. Life-threatening complications are less common.

Salivary Fistula:

This is the number one early complication after laryngectomy. It occurs in approximately 10% of patients, or up to 40% in patients who've had prior radiotherapy. Mostly this can be managed conservatively with further delays in starting you drinking, IV antibiotics and a longer hospital stay. It may also necessitate another procedure or a pectorals muscle flap to fix the problem.

Mucous Plugging:

If your lung secretions become dry or thick they can block your airway hence in the early stages it is very important to always have humidified air delivered to your stoma.

Wound infection:

Is uncommon in the head and neck region - unless a salivary fistula or hematoma has occurred. It would present with fevers, increasing pain and redness around the wound. I will have you on 5 days of IV antibiotics to help prevent this.

Hypocalcemia:

If your entire thyroid is being removed there is a risk of also removing the parathyroid glands which control your calcium levels. I will check this on blood tests in the first few days.

Lymphoedema of the upper skin flap:

The large U shaped incision and associated lymph node dissection interrupts the drainage of tissue fluid out of the skin on the front of the neck. This skin becomes a little thickened and oedematous usually

peaking around the 1-2 week mark, and occurring more significantly in patients with prior radiotherapy. It occurs to a degree in all patients but only rarely causes major issues.

Stenosis/Narrowing of your stoma:

Scars contract over time and the circular opening of your stoma is no different. In the first few weeks after surgery swelling can contribute to narrowing of your stoma also. A laryngectomy tube (a soft plastic 'stent' placed in the opening of your stoma) can be used to prevent or treat this. Rarely patients require a minor procedure years down the track to re-fashion the stoma if it narrows too much.

Stenosis/Narrowing of your pharynx:

When your throat is stitched up on the inside it will be more narrow than normal. As scar tissue contracts this can narrow further causing a deterioration in your swallow. Many patients require intermittent minor procedures months or years down the track to stretch open the inside of the throat again to improve swallowing.

Hypothyroidism:

Often half of the thyroid needs to be removed as part of the surgery. The remaining half should maintain adequate function however over the ensuing years, particularly if you've had radiation, it will be important to have an annual thyroid function test to check this.

General medical complications:

With any prolonged hospital stay with a lengthy anaesthetic and significant time spent in bed, generalised medical issues can arise. Prevention is the aim!

Pneumonia:

Deep breathing and coughing helps to clear secretions and reduce the chance of a chest infection.

Deep Vein Thrombosis:

You will have pneumatic compression stockings on during the surgery TED stocking on the ward afterwards to prevent clots forming in the calves. I also prescribe a blood thinning injection daily while you're relatively immobile. Please move your legs frequently while in bed.

After discharge, If you need help....

- 1) In hours call me via my office 52218490
- 2) After hours call me on my mobile 0425746617 -
- 3) If I am unable to respond please -attend the Geelong Hospital Emergency Department and the oncall ENT surgeon will become involved if necessary.
OR
- 4) -call an ambulance on 000

I understand that talking on the phone is difficult - I'm happy for you to contact me via SMS or via email at nick@geelonghn.com.au