### The ROYAL MARSDEN NHS Foundation Trust

# Having a tracheostomy

Head and Neck

**Patient Information** 



#### Introduction

This leaflet explains your operation and answers commonly asked questions about having a tracheostomy. If you have any concerns about your illness or your treatment, please talk to your surgeon or clinical nurse specialist (key worker).

#### What is a tracheostomy?

A tracheostomy is an artificially-created opening in the front of the neck. It goes through the skin and allows direct access to the windpipe (trachea). Tracheostomies are inserted below the level of the vocal cords.

Tracheostomies can be inserted by senior critical care doctors at the bedside in the critical care unit (CCU) or by surgeons in the operating theatre. A tracheostomy may be used:

- to deliver oxygen to the lungs when a person is unable to breathe normally
- to bypass an airway that has become blocked
- to remove fluid that has built up in the upper airway, particularly in the throat and windpipe (trachea).

#### Why do I need a tracheostomy?

Tracheostomies can either be temporary or permanent. A tracheostomy is often required when a person is unable to breathe normally because of an underlying health condition or a blockage of your airway. This can sometimes happen with mouth cancer, laryngeal cancer or thyroid gland cancer.

It may also be necessary to place a temporary tracheostomy due to the type of surgery you are having, to protect the airway from possible swelling or bleeding after the operation. If you have a temporary tracheostomy, it is usually removed a couple of days after the operation.

Some patients in critical care have breathing difficulties that need the support of a ventilator (breathing machine). At first,

the ventilator is usually connected to the lungs by a plastic tube inserted into the mouth, through the vocal cords and into the windpipe. However, some patients need breathing support for a long time and may benefit from having a tracheostomy.

#### What does the surgery involve?

A tracheostomy is usually carried out in an operating theatre under a general anaesthetic. This means you are asleep during the procedure and will not feel any pain. The surgeon will make a cut in the lower part of your neck, in between between the voice box and the top of your breastbone. The muscles are parted and the thyroid gland is cut or moved so that the surgeon has a clear view of your windpipe. They will then make an incision in the wall of your windpipe so that the tracheostomy tube can be inserted through the opening.

Sometimes it may become urgent to have the tracheostomy inserted, especially if breathing becomes very difficult. It may then be safer to perform the operation under local anaesthetic (when you are awake). Your surgeon will discuss this with you and will also talk to you about how long you may stay in hospital.

### What happens before I come into hospital?

If the tracheostomy is being performed as part of your surgery for your cancer, you will also have a pre-operative assessment visit. This is usually one to two weeks before your planned admission for your operation. During this assessment, a specialist assessment nurse will see you. They will discuss your general health with you, including any medicines you are currently taking and will decide whether you need any tests before you have a general anaesthetic. You may also be seen by either the doctor or anaesthetist, or both if the nurse feels it is necessary. They will examine you and may listen to your heart and lungs. Tests you may have include:

- routine blood tests
- ECG (electrocardiogram or heart trace)
- chest x-ray.

This appointment is also an opportunity to ask questions about your stay in hospital and to share any concerns you may have.

#### What can I expect after the operation?

Every person has a slightly different recovery – this will depend on your overall health and the extent of the operation you have. You may experience some discomfort having the tracheostomy tube. There may be increased mucus production that might require suction through the tracheostomy tube, which will result in increased coughing and potential swallowing difficulties. You may also have some difficulties with speech (please see page 4 for further information).

#### What are the possible complications?

Although there are complications with any operation, they are mostly rare with this type of surgery and you may not experience any. However, it is important that you are aware of them and have the opportunity to discuss them with your surgeon. You may experience some of the following:

- Bleeding Any surgical procedure can be complicated by bleeding, which can be minor or major. If there is significant blood loss, a blood transfusion may be necessary. The risk is 5 in 100 people.
- Damage to the food pipe (oesophageal perforation) The risk is 1 in 100 people.
- Pneumothorax Sometimes, air will collect around the lungs and cause the lungs to collapse inwards. This is known as a pneumothorax. In mild cases, this often corrects itself without the need for treatment. In more serious cases, a tube

will need to be surgically implanted into the chest to drain the air away from the lungs. The risk is 1 in 100 people.

- Misplacement or blockage of tracheostomy tube The risk is less than 1 in 100 people.
- Nerve damage The nerves near the windpipe can be accidentally damaged, such as those controlling the voicebox (larynx) or the oesophagus (the tube that runs from the back of the throat to the stomach). This may cause problems with speaking and swallowing. The risk is less than 1 in 100 people.
- Narrowing of the wind pipe (tracheal stenosis) The risk is 3 in 100 people.
- Blood clot in a deep vein (deep vein thrombosis) or the lung (pulmonary embolism). This may occur in the calf causing lower leg swelling and pain, or in the lung, causing shortness of breath or chest pain (the risk is 2-3 in 1000 people).
- Thromboembolism can be life threatening. Treatment is with blood thinning drugs. You should seek medical advice immediately if you have any of the above symptoms and are concerned you may have a blood clot. Airline travel and long journeys where you have to remain seated are also associated with an increased risk. Therefore, you are advised to seek medical advice about any plans to travel.

#### Can people talk with a tracheostomy?

It is usually difficult to speak after having a tracheostomy. Normally, speech is produced when air passes over the vocal cords. After a tracheostomy, most of the air that you breathe out passes through the vocal cords causing them to produce sound, which means you will be unable to speak normally.

After having a tracheostomy, you will be referred to a speech and language therapist (SLT). They will be able to give you further

advice and training in speaking while the tracheostomy tube is in place. This will help to improve your ability to communicate.

One solution is to use a speaking valve, which is a plastic attachment that sits at the end of the tube and is designed to temporarily close over every time you breathe out. However, it can take a while to get used to speaking with the valve and some patients are unable to wear one. In this instance, other communication methods are available such as white boards/ apps/electrolarynx.

The speaking valve helps to direct air into your voice box, allowing you to speak. You may be able to use the speaking valve for periods of time each day. This will be monitored regularly throughout your stay in hospital and is individual to each patient. A speaking valve can be put on at different stages for each patient's care and we will discuss this with you in more detail.

Swallow may be affected with a tracheostomy tube and eating usually requires the balloon around the tracheostomy tube to be deflated. The swallow will need to be checked to ensure that food is not 'going down the wrong way' (aspiration). Sometimes you may need to start on very small amounts of food first. The speech and language therapist will assess you and see if you can swallow safely.

#### How can the dietitian help me?

The dietitian can assess:

- Your nutritional status by looking at your usual eating habits and weight history.
- Your nutritional requirements using different food textures and additional calories and protein as necessary.

Working closely with other members of the team, the dietitian will advise on the most suitable way for your nutritional requirements to be given to you.

#### Cleaning the tracheostomy tube

A tracheostomy tube needs to be cleaned whenever it gets blocked with mucus or fluid. The tube may need to be cleaned several times a day. If the tube is permanent or if you are allowed to return home with the tube still in place, a specialist tracheostomy nurse will teach you how to take care of it. They will show you how to suction fluid from your windpipe (trachea) and how to clean and change your tracheostomy tube.

#### Removing the tracheostomy tube

If you have a temporary tracheostomy, the tube should be able to be removed when you are able to breathe, protect your airway and clear fluids unaided. When the tracheostomy is removed, the hole is covered with an airtight dressing. The opening will usually take one to two weeks to heal, and afterwards you may have a small scar where the opening was.

If you are going to be discharged with a tracheostomy tube and would like further information, please ask your CNS for The Royal Marsden factsheet *Caring for your tracheostomy at home and what to do in an emergency.* 

#### **Contact details**

If you have any further questions about your surgery, please contact your clinical nurse specialist or surgical team.

The Royal Marsden switchboard: 020 7352 8171 Clinical Nurse Specialist (Head & Neck)/Key Worker: ext 1546 Advanced Nurse Practitioner (Head & Neck Surgery): ext 4700 Physiotherapy team: 020 7808 2821 (answer machine) Dietetics team: 020 7808 2814 (answer machine) Speech and Language Therapists: 020 7808 2815 (answer machine)

Alternatively, please call:

**The Royal Marsden Macmillan Hotline:** 020 8915 6899 (available 24 hours a day, 7 days a week)

#### **Further support**

You can find more information about the types of head and neck cancer, surgery or other treatments from Macmillan Cancer Support.

Support line:	0808 808 00 00
	(Monday to Friday, 9am – 8pm)
Website:	www.macmillan.org.uk

This leaflet has been adapted by Jorn Rixen-Osterbro, Advanced Nurse Practitioner, from the patient information leaflets produced by UCLH and NHS Choices.

## Questions and notes

#### References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre Freephone: 0800 783 7176 Email: patientcentre@rmh.nhs.uk

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.



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