



TRACHEOSTOMY

PATIENT AND CARER INFORMATION

What is a tracheostomy?

A tracheostomy is a small hole, made in the front of the neck, that passes through the skin and enters the trachea (windpipe). The hole is made below the level of the vocal cords (voice-box). A tracheostomy tube is then placed into the hole. A senior doctor carries out the procedure and it is usually possible to perform this at the bedside on the Intensive Care Unit. Occasionally it may need to be done by a surgeon in the operating theatre.

Why is a tracheostomy needed?

Many patients on the Intensive Care Unit have breathing difficulties that require the support of a ventilator (breathing machine). During the first days of being unwell the ventilator is usually connected to the lungs by a plastic tube that passes via the mouth into the windpipe. Some patients, who have a poor cough or are likely to need help with their breathing for a long time, may benefit from having a tracheostomy.

What are the benefits of a tracheostomy?

There are a number of proposed benefits of a tracheostomy. These include:

- Easier suctioning and removal of chest secretions. This is particularly important for patients who have a weak cough.
- Improved comfort. It is usually more comfortable than having a tube in the mouth. This means that sedative drugs can be reduced or even stopped.
- Aid weaning (coming off the ventilator).
- Improved mouth care. Nursing staff are better able to brush the teeth and clean the mouth. This may help to prevent chest infection.
- Improved communication. With less sedation and the ability to mouth words more clearly, patients may be able to tell staff and family their needs or concerns.

As tracheostomies are usually inserted at the bedside here in the Intensive Care Unit, most patients do not need to be moved.

What are the alternatives to a tracheostomy?

There is unfortunately no real alternative to a tracheostomy, other than leaving the tube in the mouth. This in itself can carry risks over time of injury to the mouth, vocal cords and windpipe.

The decision to perform a tracheostomy is only made after careful consideration by an experienced Intensive Care Consultant.

Is a tracheostomy safe?

Although a tracheostomy is normally safe, as with any procedure it does carry some risks. These are associated with the anaesthetic needed to perform the procedure, as well as with the tracheostomy insertion itself. Studies show that serious complications are fortunately rare.

What are the anaesthetic risks?

Most patients will already have had an anaesthetic when they became unwell and the breathing tube was inserted. They are also likely to still be on sedative drugs to tolerate the breathing tube. Before performing the tracheostomy, sedation levels are increased such that a general anaesthetic is given. The patient is looked after and monitored throughout by a person skilled in anaesthetic techniques.

During the procedure the breathing tube is pulled back to the level of the vocal cords to enable the tracheostomy to be inserted. A very rare, but nonetheless very serious complication, is that it is impossible to insert the tracheostomy tube and that the breathing tube cannot be pushed into the windpipe after it has been pulled back. This could potentially result in low oxygen levels. Additionally, although precautions are taken, damage to the lips, teeth and eyes may occur. Serious drug allergy or equipment failure is also fortunately very rare.

What are the tracheostomy risks?

These are best considered in terms of those occurring immediately during the procedure to insert the tracheostomy and those that can occur later on.

Immediate Risks (within minutes)

- Low oxygen levels (less than 1% risk)
- Bleeding (less than 5% risk)
- Damage to the windpipe (less than 1% risk)
- Damage to the lungs causing an air leak (less than 1%)

Later Complications (within a few days to weeks)

- Bleeding, which may be life threatening (less than 5% risk)
- Dislodgement of the tracheostomy (less than 3%)
- Infection (less than 5%)

Late Complications (weeks to months)

- Scarring of the neck (1%)
- Tracheal stenosis (narrowing of the windpipe) – less than 3%

How long will the tracheostomy be needed?

This will vary considerably depending on the reason it was needed. It is rare that a tracheostomy is required permanently. Regular assessments will be made to see when it is safe to take it out (decannulation). This may happen on the Intensive Care Unit, but more often after discharge to the ward.

Sometimes a tracheostomy may be changed to one of a smaller size for a time before final removal. This allows the patient to get used to breathing through the mouth again, but allowing the suctioning of chest secretions.

Can you talk with a tracheostomy?

After the tracheostomy is first inserted this is unlikely. However, as patients recover and get stronger, it is usually possible to deflate the balloon around the tracheostomy tube. This allows air from the lungs to travel past the tracheostomy tube and over the vocal cords, allowing speech. A valve can be placed onto the tracheostomy tube to help. This can be quite tiring at first so may only be possible for short periods of time.

Can you eat with a tracheostomy?

A tracheostomy can make swallowing quite difficult for some patients, especially if the swallowing muscles have not been used for a prolonged period. A test can be done to check that the swallow is safe. When it is safe to do so eating will be encouraged.

What happens after the tracheostomy is removed?

When it is safe to do so, the tracheostomy will be removed. This is usually very straightforward and can be done on the ward. A dressing is then put over the hole and this will heal over a few weeks. Very occasionally the tracheostomy may need to be replaced if the patient does not tolerate removal.

What happens now?

If you have any questions or concerns speak to the bedside nurse in the first instance. A member of the medical team will want to talk with you in any case before the tracheostomy is inserted. Specific individual details or questions can then be discussed further if you wish.