Surgical tracheostomy

A guide for patients and their relatives

This leaflet explains what a surgical tracheostomy is, and answers many commonly asked questions.

What is a tracheostomy and why is it performed?

A tracheostomy is an opening made in the upper part of the windpipe (trachea) just below the voicebox (larynx). It is often performed in patients on intensive care unit (ITU) who are connected to a ventilator by an oral tube. The effect of a tracheostomy reduces the distance from the lungs to the outside atmosphere compared to the distance if the oral tube were kept in place. This helps wean patients off the ventilator more quickly, and enables them to breathe on their own. A tracheostomy also enables nurses to suction secretions from the windpipe more easily. A tracheostomy can also be performed for a patient who is expected to require a prolonged period of time on the ventilator.

How is it performed?

Often, the doctors on the ITU will create a tracheostomy themselves. This is performed by making a small skin incision over the upper windpipe, then using a series of dilating tubes to create the hole in the windpipe.

For patients with a bulky, short neck, those who have previously had a tracheostomy, those with a neck injury or those with a large thyroid gland usually require an open surgical tracheostomy. This procedure is performed under a short general anaesthetic in an operating theatre by an ear, nose and throat (ENT) surgeon. A horizontal skin incision 1.5-2 inches/2-5cm long is made in the lower part of the neck over the windpipe. The thyroid gland sits over this part of the windpipe, and it usually has to be cut in half to enable access to the windpipe. A small hole is created in the windpipe, and the tracheostomy tube is inserted. The skin incision is partially closed with stitches, and the tube itself is secured in place with stitches to the skin and tapes wrapped around the neck. Once the tracheostomy tube is finally removed, the skin edges will come together, and the wound will close.

What problems can occur as a result of a tracheostomy?

It is very rare for a serious problem to arise as a result of a tracheostomy. Some of the most common problems include:

Bleeding

This can either occur at the time of the operation or a few days afterwards. The most common site of bleeding is either from the skin edges or from the thyroid gland after it was divided. If the bleeding does not stop with pressure dressings or application of a chemical called silver nitrate, it is sometimes necessary for the patient to return to theatre to stop the bleeding.
Infection of the wound
Infection can occur after any surgical procedure, especially if there is an open wound in contact with the atmosphere. This is usually treated with antibiotics.

Movement of the tube
The tube can be moved accidentally, despite it being sewn to the skin, and can become dislodged or fall out. It is usually possible to reinsert it. Similarly, the tube can sometimes become blocked with dried secretions which are easily cleared.

Healing difficulties
For patients on steroids or with certain underlying medical conditions such as diabetes, their ability for open wounds to heal may be impaired. This could become problematic after the tracheostomy tube is removed, and the skin edges fail to close together properly. Sometimes this requires a short procedure to help close the edges surgically.

Long term effects
If the tracheostomy tube is in place for an extended time period, it is possible for the upper windpipe to become slightly narrowed as a result of prolonged pressure from the tube. This could lead to future breathing problems.

If you have any other questions that the leaflet does not answer or would like more information please ask your surgeon or contact: 01223 ____________

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