

## Introduction

1. Tracheostomy is an operation in which an opening is made through the neck skin to the wind pipe.
2. A tube is inserted into the opening, through which breathing can continue.

## Indications

1. Upper airway obstruction.
2. Prolonged endotracheal intubation.
3. Aspiration pneumonia.
4. Airway protection.

## Intended Benefits and Expected Outcome

1. Relief of upper airway obstruction and protection of airway.
2. A tube is kept in the neck for breathing until normal airway is restored.
3. There is a chance of failure to relieve problems and recurrence.

## The Operative / Procedure

The operation is done under general or local anaesthesia. An opening through the neck is made into the wind pipe, and a tracheostomy tube is inserted to maintain patency of the opening, enabling unobstructed breathing or sputum clearance.

## Preoperative Preparation

1. Admit 1 day before or on same day of this “elective” operation.
2. Anaesthetic assessment before operation. Inform your doctors about drug allergy, regular medications or other medical conditions.
3. Keep fast for 6 to 8 hours before operation.
4. Empty bladder and change to operation clothes before transfer to operating room.
5. Pre-medication, antibiotic prophylaxis intravenous line may be required.

## Postoperative Instruction

### A. General

1. Mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over the operation site. Inform nurse or doctor if pain severe.
3. Nausea or vomiting are common; inform nurses if symptoms severe.
4. Inform nurses if more analgesics are required.

### B. Wound care

1. The wound usually heals in about two weeks.
2. The tracheostomy tube needs regular cleansing and replacement.
3. Speech difficulty will be encountered.
4. Temporary swallowing problem, usually resolves with time.
5. Inform your doctor if there is excessive discharge or bleeding from the tracheostome.
6. If you experience shortness of breath or tracheostomy tube dislodgement, please attend the nearby emergency department as soon as possible.

### C. Diet

Resume diet, usually 4 hours after anaesthesia, and when taking sips of water well.

**Common Risks and Complications** (not all possible complications are listed)**A. Anesthesia related complications**

1. Cardiovascular : myocardial infarction or ischaemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
2. Respiratory : atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease.
3. Allergic reaction and shock.

\*\* Toxicity of local anaesthetic may result in serious complication although rare.

**B. Procedure related complications****Common Risks and Complications ( $\geq 1\%$  risk)**

1. Bleeding.
2. Infection.
3. Swallowing problem.
4. Speech problem.
5. Tracheostomy tube blockage and dislodgement causing asphyxia.
6. Surgical emphysema.

**Uncommon Risks with Serious Consequences ( $< 1\%$  risk)**

1. Apnea.
2. Tracheal stenosis.
3. Injury to other neck structures.
4. Pneumomediastinum and pneumothorax.
5. Tracheocutaneous fistula.
6. Erosion into large vessels causing fatal bleeding.
7. Erosion into esophagus causing aspiration.
8. Failed weaning of tracheostomy.
9. Death due to serious surgical and anaesthetic complications.

**Alternative Treatment**

Endotracheal intubation.

**Conditions that Would Not be Benefited by the Procedure**

Lower airway obstruction.

**Consequences of No Treatment**

1. Airway obstruction and death.
2. Injury to the trachea with resulting stenosis after prolonged intubation.
3. Aspiration and recurrent pneumonia.

**Things to take note on discharge**

1. Contact your doctor or a nearby Accident & Emergency Department if you find increasing discharge, pain and or redness around the wound.
2. Take analgesics prescribed by your doctor if required.
3. See the doctor as scheduled.

**Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

**Reference**

Hospital Authority: "Tracheostomy" (2023)

Smart Patient: [http://www.ekg.org.hk/pilic/public/ENT\\_PILIC/ENT\\_Tracheostomy\\_0131\\_engchi.pdf](http://www.ekg.org.hk/pilic/public/ENT_PILIC/ENT_Tracheostomy_0131_engchi.pdf) (06-07-2023)