

Introduction

Bronchoscopy is a procedure that a slim and flexible endoscope is passed into the major airway through the nose or mouth or a breathing tube placed in the respiratory tract (endotracheal tube or tracheostomy tube). It enables the doctor to perform diagnostic or treatment procedure on the trachea and bronchus under direct vision.

1. For treatment: Stop bleeding or remove blockage by foreign object or retained sputum in the airway.
2. For diagnosis: To obtain sputum or bronchial secretion or lung tissue for testing of infection or malignancy; to locate site of bleeding; to evaluate abnormal chest X-ray findings; to assess hoarseness of voice; to confirm suspicion of obstruction of breathing tube, and to locate trachea for tracheostomy operation.

The Operation / Procedure

1. Patient's vital signs (e.g. blood pressure, pulse rate and oxygen saturation) are closely monitored.
2. Patient is kept in face-up position.
3. Supplementary oxygen is given.
4. Depending on the route of insertion of the bronchoscope, nostrils and throat may be sprayed with local anaesthetics agent to reduce discomfort. Sedative drugs may be administered when necessary.
5. The bronchoscope is inserted through the nose, mouth or breathing tube into the bronchial tree.
6. Airway irritation resulting in coughing may happen during the procedure.

Preoperative Preparation

1. Admit 1 day before or on same day of this "elective" operation.
2. Inform your doctors about drug allergy, regular medications or other medical conditions.
3. Blood tests including blood gases will be performed.
4. Keep fast for 6 to 8 hours before the procedure.
5. Empty bladder and change to operation clothes before transfer to operating / endoscopy room.
6. Pre-medication, intravenous line and antibiotic prophylaxis may be required.

Postoperative Instruction

1. Slight sore throat and coughing with blood stained sputum may be expected for a short period of time. Medication may be prescribed to relieve the symptoms.
2. Feeling of sleepiness or dizziness may occur if sedation is given during the procedure. Bed rest for a few hours is recommended.
3. Inform nurses if more analgesics are required.
4. The patient should use a semi-recumbent position and change position regularly to facilitate lung expansion.
5. Deep breathing and coughing exercise, early mobilization to enhance lung function and prevent chest infection.
6. Resume diet, usually 4 hours after anaesthesia, and when taking sips of water well.
7. Chest X-ray might be taken after the procedure to look for any complications related to the procedure.

Common Risks and complications**A. Anesthesia related complications**

1. Discomfort during procedure (e.g. cough, sore throat).
2. Side effect of sedatives (e.g. sleepiness, dizziness, drop in blood pressure) or local anaesthetics.

B. Procedure related complications (not all possible complications are listed)

1. Pneumothorax.
2. Bleeding from lung / trachea / bronchus.
3. Transient worsening of respiratory condition (e.g. increase O₂ requirement, difficulty in breathing).
4. Risk of introducing bacteria into lung causing infection.

** There is a possibility that the procedure could not be performed or completed, e.g. uncooperative patient or occurrence of complications.

Things to take note after discharge

1. Contact your doctor or a nearby Accident & Emergency Department if you find difficulty in breathing, high fever over **38°C** or **100°F**, etc.
2. Take analgesics prescribed by your doctor as necessary.
3. Continue breathing exercises to help with the recovery.
4. Resume daily activity gradually.
5. Attend follow-up consultations as scheduled.

Other treatment options

If you decide not to undergo this procedure, the disease may progress, but exactly how depends on the disease type. Alternative treatment options where available will, also depend on the disease type. Let your doctor explain to you.

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: "*Bronchoscopy*" (2020)

Smart Patient: http://www.ekg.org.hk/pilic/public/icu_PILIC/ICU_Bronchoscopy_0057_eng.pdf (12-07-2023)