

Introduction

Video-assisted Thoracoscopic Lobectomy is a minimally invasive approach for the management of early-stage lung cancer. The doctor makes several small incisions on chest wall to provide access to the chest cavity without separation of the ribs, Surgical instruments and the thoracoscope are inserted through these incisions. Surgeons and assistants perform the operation while watching the images of the operative area transmitted via the thoracoscope to a screen. Compared to traditional open chest operation, this VAT lobectomy gives better results in form of less pain, less complications and faster recovery.

The Operation / Procedure

1. General anaesthesia.
2. Four small incisions are made in the chest wall for insertion of a thoracoscope and surgical instruments.
3. The tumor or affected tissue from the lung is removed.
4. The thoracoscope and instruments are then removed, and the incisions are closed.
5. One or two drains will be kept after operation for the drainage of excess fluid and air from around the lungs.

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, intravenous line and antibiotic prophylaxis 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.
5. The patient should use a semi-recumbent position to facilitate lung expansion and change position regularly to facilitate drainage from the chest cavity.
6. Deep breathing exercise to enhance lung recuperation and avoid chest infection.
7. The hospital stay is typically for 5-7 days which may vary with health condition of the patient.

B. Wound care

1. Kept dressing clean and dry.
2. Ensure the drainage tube(s) is secured in place. Do not pull, twist, clamp and apply pressure on the tube.
3. The tube(s) will be removed 2-7 days after the operation.

C. Diet

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

Common Risks and Complications**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.

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

1. Bleeding / Infection
2. Haemothorax (Blood collection in the chest cavity) / Pneumothorax (air in the chest cavity)
3. Subcutaneous emphysema (air or gas in subcutaneous tissues)
4. Damage to other organ(s)

** In the event of other organ(s) damage or post-operative haemorrhage or air leakage, further operations may be required.

Things to take note after discharge

1. Contact your doctor or a nearby Accident & Emergency Department if you find increasing discharge, pain or redness around the wound, high fever over **38°C or 100°F**, etc.
2. Take analgesics prescribed by your doctor as necessary.
3. Keep the wound dressing clean and dry, change the dressing if necessary.
4. Continue breathing exercises to help with the recovery.
5. Resume daily activity gradually. Heavy lifting and strenuous exercises should be avoided for first 1-2 months.
6. Attend follow-up consultations 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

US National Library of Medicine. National Institutes of Health: “*Journal of Thoracic Disease - Techniques of VATS Lobectomy*”
Adopted from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3771593/> (12-07-2023)