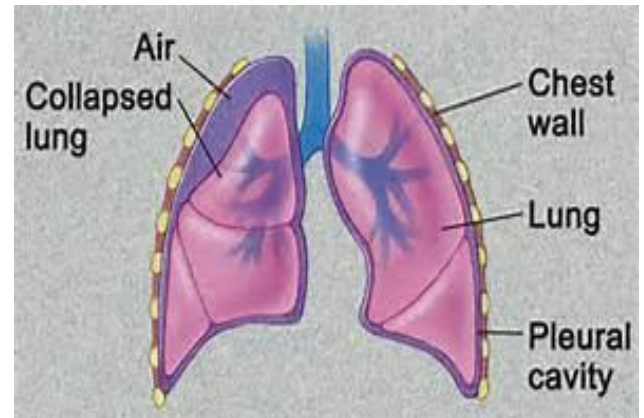


Introduction

Video-Assisted Thoracoscopic Surgery (VATS) - Pleurodesis is a minimally invasive surgical approach for the management of collection of air (pneumothorax) or collection of fluid (pleural effusion) between the lung and chest wall (pleural space) (Picture 1). The condition is potentially dangerous because "tension pneumothorax" could occur whereby the lung is compressed and could not expand. This procedure is performed with a thoracoscope (small video-scope) through small incisions. After removal of air / fluid from the pleural space, a mild irritant drug is put inside the pleural space to stick the lung to the chest wall. The pleural space will be fixed in place to prevent the recurrence of pneumothorax.



Picture 1

The Operation / Procedure

1. General anaesthesia.
2. One to two small incisions are made in the chest wall.
3. A thoracoscope and surgical instruments are inserted into the chest cavity.
4. Guided by thoracoscopic images of the operation area, air or fluid is removed from the chest cavity.
5. A talc solution is then blown or sprayed evenly over the pleural surfaces.
6. 1-2 drainage tubes are put in place before wound closure for the drainage of residual fluid or air.

Preoperative Preparation

1. Admit 1 day before or on same day of this "elective" operation.
2. Anaesthetic assessment. Inform 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 operation site. Inform nurse or doctor if pain severe, or more analgesics needed.
3. Nausea or vomiting are common; inform nurses if symptoms severe.
4. The patient should use a semi-recumbent position to facilitate lung expansion and change position regularly to facilitate drainage from the chest cavity.
5. Mobilize early with deep breathing / coughing exercise to recuperate lung function and prevent chest infection.
6. The hospital stay is usually for 5-7 days.

B. Wound care

1. Keep dressing clean and dry.
2. Ensure the drainage tube is in right place. Do not pull, twist, clamp and apply pressure.
3. The drains will be removed in 2-7 days.

C. Diet

Resume diet, usually 4-6 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.

B. Procedure related complications

1. Bleeding / Infection.
2. Hemothorax / Pneumothorax.
3. Subcutaneous emphysema.
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. The breathing exercises should be continued to help with recovery.
5. Resume daily activity gradually. Heavy lifting and strenuous exercises should be avoided for 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

Oxford University Hospitals NHS: "Oxford Centre for Respiratory Medicine - Pleurodesis - Information for patient" (2018)
<https://www.ouh.nhs.uk/patient-guide/leaflets/files/12373Ppleurodesis.pdf> (25-07-2023)