



Operation Information

Video Assisted Thoracoscopic Surgery - Wedge Excision of Lung

Introduction

Video-assisted Thoracic Surgery (VATS) - Wedge Excision of Lung is a minimally invasive thoracic surgery performed with a thoracoscope, using small incisions and special instruments to minimize trauma. A wedge excision is the surgical removal of a wedge-shaped portion of tissue from the lung(s). The right lung has three lobes and the left lung has two lobes. Wedge excision refers to the removal of an area of lung smaller than a lobe. This is typically performed for the diagnosis or treatment of early-stage cancer.



Wedge resection

Outcomes

Patient who has undergone VATS- wedge excision of lung has smaller wounds, less pain and diminished complications when compared with those having traditional open chest operation. A faster recovery is also expected. This operation helps to reduce the risk and morbidity of lung lesion or tumor.

Source:
https://www.uhn.ca/Surgery/Thoracic_Surgery/Wedge_Resection_Surgery_Guide/PublishingImages/Pages/default/SC_C_PF_Wedge_Resection.jpg

Procedures

1. The operation is performed under general anaesthesia.
2. Three to four small incisions are made in the chest at the level of the wedge to be removed.
3. A thoracoscope and surgical instruments are inserted into the incisions.
4. The doctor is guided by images of the operative area transmitted from the thoracoscope onto a computer monitor during the operation.
5. A wedge-shaped portion of affected tissue is removed from the lung through the small incisions.
6. After resection, one or two chest tubes are placed into the surgical area to allow draining of excess fluid and air from around the lung.
7. The wounds are closed with stitches or staples.

Possible Risks and Complications

1. Wound bleeding
2. Wound infection
3. Hemothorax (Blood collection in the chest cavity)
4. Pneumothorax (Presence of air in the chest cavity)
5. Subcutaneous emphysema (Presence of air or gas in subcutaneous tissues)
6. Damage to other organ(s)

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of other organ(s) damage or post-operative haemorrhage or air leakage, further operations may be required.

Pre-operative Preparations

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. We strongly recommend that you stop smoking prior to surgery.
3. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
4. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation, such as Aspirin, Warfarin, Xarelto or Pradaxa, nonsteroidal anti-inflammatory drug (NSAID) such as Ibuprofen, Naproxen and Chinese medication.
5. An anti-embolism stocking may be arranged according to doctor's prescription to prevent post-operative deep vein thrombosis.
6. Clipping of hair may be required at the incision site and axilla.
7. Nurse will supply surgical soap to you for washing your whole body, especially your chest area and axilla.
8. Your doctor may use surgical marker to mark the side you are to be operated on and please do not wash off the marking.
9. No food or drink six hours before operation.
10. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
11. Please empty your bladder before the operation.

Post-operative Instructions

General

1. After general anaesthesia, you may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anaesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
3. You may be placed on a device that provides pain medication whenever you press a demand button (called a PCA, or Patient Controlled Analgesia) if needed.
4. You should use a semi-recumbent position to facilitate lung expansion and change position regularly to facilitate drainage from the chest cavity.
5. A chest drain is used to drain out the body fluid, blood and air. You must ensure the drainage tube is stayed in place. Do not pull, twist, clamp and apply pressure on the drainage tube.
6. The chest drains will be removed after the operation according to individual's condition. Usually 1-2 days.
7. You may have an indwelling urinary catheter in your bladder, nurse will measure and monitor your urine; this would normally be taken out the next morning.
8. Physiotherapists may be referred as doctor's advice to instruct you how to cough and help you to expand your lungs to prevent a chest infection.
9. The hospital stay is typically for 2-3 days which may vary with health condition of the patient.

Wound Care

1. The wound will be covered with a sterile dressing which must be kept dry.
2. The wound dressing will be changed according to doctor's order.
3. You may take shower after the operation but must ensure that the dressing is waterproof and remains clean and dry.

Diet

A normal diet may be resumed as instructed after recovery from anaesthesia.

Advice on Discharge

1. Please comply with the medication regime as prescribed by your doctor.
2. You must ensure the wound is kept clean and dry, change the dressing if necessary (as instructed by doctor).
3. Regular activities can be resumed gradually along with a balanced diet.
4. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain associated with redness and swelling, secretion of pus or blood seepage, difficulty breathing, shortness of breath, increase swelling over the chest (subtaneous emphysema), shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms, etc.
5. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification