



## Procedure Information

### Insertion of Chest Drain

#### Introduction

Chest drain insertion is a minor surgical procedure for being used to remove abnormal collection of air or fluid by the insertion of a clear plastic straight tube (known as chest drain) into the chest cavity. Suction may be applied via a drainage system.

#### Indications

1. Pneumothorax (air leaks from the lung into the chest)
2. Pleural effusion
3. After surgery or trauma in the chest (pneumothorax or hemothorax)
4. Empyema (pus in the chest)
5. Hemothorax (bleeding into the chest)

#### Outcomes

This procedure can use to drain the abnormal fluid and air from the chest cavity in order to prevent risks of infection and morbidity.

#### Procedures

1. The procedure is performed under local anaesthesia.
2. A skin incision is made below the axilla of the affected chest.
3. A drain is inserted to the chest cavity.
4. The external end of the drain is connected to a drainage system.
5. The drain is anchored to the chest wall by a stitch.
6. The site is covered by a sterile dressing.

#### Possible Risks and Complications

1. Wound pain
2. Wound bleeding
3. Wound infection
4. Damage to the nearby organs
5. Undrained collection of air or fluid
6. Post-drain removal air leak which requires re-insertion of another drain
7. Inadequate or improper placement of drain which requires removal and re-insertion of another drain
8. Surgical emphysema (air tracking into the fatty tissue under the skin)
9. Drain blockage or falls out

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all procedures are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising.

## **Pre-procedure Preparations**

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of procedure.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the procedure.
3. 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.

## **Post-procedure Instructions**

1. Gentle and slow movement can help to prevent slippage of the drain.
2. Frequent deep inspiration is necessary as it aids in the removal of air or fluid in the chest cavity.
3. The drainage system should be placed below the level of waist.

## **Advice on Discharge**

1. The drain will have to stay for a few days. After the drain is removed, a chest X-Ray is used to confirm the lung is normally expanded.
2. Immediately consult your doctor or return to hospital for professional attention in the event of severe chest pain, difficulty breathing, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms etc.
3. 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.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

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