

## **Chest Tube Insertion**

### **Introduction**

Chest tube is a plastic tube being used to remove abnormal collection of air or fluid from the chest cavity. Suction may be applied via a drainage system. A small skin incision is required for the tube insertion to the affected chest. The tube will have to stay there for a number of days and medications may be given through the tube as advised by your doctor.

### **Procedure**

Chest tube insertion is a minor surgical procedure. Pain relief is provided by local injection of anaesthetic solution with or without systemic sedative drugs. A small skin incision is to be made below the axilla of the affected chest. Certain length (about 10-12 cm in a teenager) of the tube will stay inside the chest cavity. The external end of the tube is to be connected to a drainage system. A stitch will be used to anchor the tube in position.

### **Preparation**

- Be relaxed!
- Put the arm of the affected side to a position according to the instruction of the doctor/nurse.
- The skin area will be sterilized by antiseptic solution and draped with sterile towel.
- Don't touch the towel as this will increase chance of infection.

### **Complication Risk**

- Pain, bleeding, bruises, bone injury and air leaking underneath skin plane
- Persistent collection of air / fluid (may require surgical operation)
- Malpositioning of the tube (may require re-insertion of another tube)
- Infection

- Air leakage after the removal of the tube (may require re-insertion of another tube)
- Re-expansion pulmonary oedema (exacerbation of respiratory distress after chest drain insertion)
- Massive bleeding; Penetration into adjacent organs; Lung collapse; Mortality

### **Aftercare**

- Frequent deep inspiration will help removal of air / fluid in the chest cavity.
- Move gently and slowly to avoid slippage of tube
- Consult the doctor/nurse if increasing difficulty in breathing or excessive pain.

### **Remarks**

The list of complications is not exhaustive and other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For any queries or further information, please consult our medical staff.