

ASCENSION ST VINCENTS

CHEST TUBE PLACEMENT PATIENT HANDOUT

Radiologist who performed your procedure:

Procedure Description:

- An image-guided chest tube placement is performed to remove air (pneumothorax) or fluid (pleural effusion) from the space around the lung to help the lung re-expand and improve breathing.
- During the procedure, a radiologist uses imaging (usually ultrasound or CT) to precisely guide placement of the tube. The skin is cleaned with antiseptic, and local anesthetic is used to numb the area. A thin drainage tube (chest tube) is inserted into the space around the lung. The tube is connected to a drainage system that allows air or fluid to be removed. The chest tube is secured to the skin with a suture and covered with a dressing. The tube will remain in place for several days, depending on how quickly the air or fluid resolves.
- The procedure itself usually takes about 30–60 minutes.
- Patients almost always remain in the hospital while the chest tube is in place.

Benefits:

- Removes air or fluid from around the lung to help improve breathing.
- Allows the lung to re-expand in cases of pneumothorax.
- Relieves symptoms such as shortness of breath and chest discomfort caused by fluid buildup.
- Imaging allows the radiologist to precisely place the chest tube.
- May avoid the need for more invasive surgical procedures.
- Uses a small incision and targeted placement.
- Provides continuous drainage while the tube is in place.

Risks & Potential Complications:

- The following list includes some, but not all, possible complications.
- Pain is common but usually mild, typically resolves within a few days, and can be managed with over-the-counter pain medication. Severe pain can occur but is uncommon.
- Minor bleeding is common and usually does not require medical treatment. Any resulting bruising typically resolves on its own over several days. Serious bleeding that requires medical treatment (such as hospital admission, blood transfusion, or an additional procedure or surgery) can occur but is uncommon.
- Infection can occur but is uncommon. Most infections are mild and can be treated with antibiotics.
- Injury to nearby organs, bowel, blood vessels, or nerves can occur but is uncommon.
- Incomplete drainage of fluid or persistent leakage of air can occur and may require repositioning or replacement of the tube or placement of additional tubes.
- The chest tube can become clogged or move out of position and may require adjustment or replacement.
- Fluid build-up within the lung after re-expansion (re-expansion pulmonary edema) can occur but is rare and may require medical treatment.

- Inaccurate or inconclusive results can occur. In some cases, a repeat procedure or surgical biopsy may be needed.
- Feeling faint or lightheaded (a vasovagal reaction) can occur during or after the procedure. This is usually mild and resolves quickly.
- Allergic reactions to the local anesthetic, topical antiseptic or other medications are uncommon.
- Death can occur but is rare.

Alternatives:

- Observation with oxygen therapy and repeat imaging, which may be appropriate for small pneumothoraces or fluid collections.
- Needle aspiration, which may be used in select cases to remove air or fluid without leaving a tube in place.
- Thoracentesis, which may be performed to remove pleural fluid without placement of a chest tube.
- Surgical management, which may be required in some cases depending on the underlying condition or response to treatment.
- Some patients choose no further treatment; however, this carries the risk of worsening symptoms or lung collapse and is generally not recommended.

Aftercare Instructions:

- A bandage will be applied over the procedure site. Change the bandage as needed and anytime it becomes wet.
- You may shower and allow water to flow over the site 24 hours after your procedure; however, do not submerge the site in water (bath, pool, hot tub, or ocean) until the drain has been removed and the site has healed.
- Do not apply lotion or ointment to the site until it has healed unless instructed to do so.
- Avoid strenuous physical activity for at least 24 hours after your procedure. Then gradually increase your activity level as tolerated.
- It is normal to experience mild pain and bruising after your procedure. You may take acetaminophen (Tylenol), aspirin, ibuprofen (Motrin), or naproxen (Aleve) for relief. It is safe to take aspirin, ibuprofen, or naproxen soon after your procedure; however, you may experience increased bruising if you do so.
- Contact your ordering provider or nurse if you have any concerns or experience any of the following: continued bleeding; significant swelling; severe pain not responding to over-the-counter medications; signs of possible infection (significant redness or purulent drainage from the site, severe pain, fever, or chills); shortness of breath and/or chest pain worse than normal for you; dizziness or lightheadedness when standing; a faster-than-normal heart rate; or drainage from around the catheter.

How Do I Receive Procedure Results?

- If fluid is removed, it may be sent to the laboratory for analysis. Results are typically available within 5 business days (sometimes longer).
- Please contact your ordering provider's office to obtain results and follow-up instructions.