

ASCENSION ST VINCENTS

LUNG PROCEDURE PATIENT HANDOUT

Radiologist who performed your procedure:

Procedure Description:

- An image-guided lung biopsy is a procedure used to obtain a sample of a lung lesion found on an imaging study. The procedure helps find out if the area is benign (not cancer) or malignant (cancer). During the procedure, a radiologist uses CT imaging to precisely target the lesion. The skin is cleaned with antiseptic, and local anesthetic is used to numb the area.
- For a biopsy procedure, a small needle is used to obtain several tissue samples of the area. These samples are sent to the pathology department for testing.
- For an aspiration procedure, a small needle is used to obtain a fluid sample from the area. The sample is sent to the laboratory for testing.
- The procedure itself usually takes 30-60 minutes. The patient is then observed for several hours to watch for any procedure complications.
- Most patients go home the same day, although occasionally patients are kept in the hospital overnight or rarely longer.

Benefits:

- Minimally invasive: The procedure uses small needles with no incisions or stitches.
- Accurate diagnosis: The procedure has accuracy rates of up to 90% for malignancy.
- Help guide treatment: The results allow providers to decide the best course of treatment.
- Low risk of complications: The risk of serious complications is low, with most side effects being mild and temporary.
- Rapid recovery: Most patients return to normal activities soon after the procedure.

Risks & Potential Complications:

- Pain: Many patients experience some degree of pain. The pain is usually mild, usually goes away within a few days and can often be managed with over-the-counter pain medicine.
- Bleeding: Bleeding can occur (about 10-45% of cases). Most bleeding is mild and stops on its own. The risk depends on the size, location/depth and nature of the lesion.
- Infection: Infection is rare (less than 1% of cases). Most infections are mild and can be treated with antibiotics.
- Pneumothorax: A collapsed lung can occur (about 15-35% of cases). This results from air leaking into the space surrounding the lung. Many mild cases are observed with chest radiographs, while some cases (up to 15%) require placement of a small tube to remove the air and require a hospital stay.
- Hemoptysis: Coughing up blood can occur (up to 20% of cases). The bleeding is usually mild and stops on its own.

- Inconclusive results: The procedure may not always give a clear answer (up to 10% of cases). Sometimes, a repeat procedure or surgery may be needed. The risk depends on the size, location/depth and nature of the lesion.
- Hemothorax: Blood collecting in the chest cavity surrounding the lung can occur (up to 5% of cases).
- Vasovagal reaction: Feeling faint or lightheaded can occur during or after the procedure (up to 5% of cases). It is usually mild and goes away quickly.
- Allergic reaction: A reaction to the local anesthetic, topical antiseptic or other medications is rare (less than 1% of cases).
- Air embolism: Air bubble formation in the blood stream is rare (less than 1% of cases).
- Death: Death is rare (less than 0.2% of cases).

Alternatives:

- Bronchoscopic biopsy: Inserting a device through the patient's windpipe (trachea) and using small needles to obtain tissue and other samples.
- Surgical biopsy: A traditional surgical procedure is performed to obtain tissue samples.
- Imaging surveillance: Using periodic imaging to determine if the area is growing or spreading.
- Radiation treatment: Treating the lesion with radiation without knowing if the area is malignant or not. This option is not applicable to all patients and is only used in rare cases.
- No further evaluation: Some patients choose not to investigate the area, although this carries the risk of missing or delaying a cancer diagnosis and is generally not recommended.

Aftercare Instructions:

- One or more bandages will be applied over the procedure site. You may remove the bandage 24 hours after your procedure.
- 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 site has healed.
- Do not apply lotion/ointment to the site until it has healed unless you are instructed to do so.
- Avoid strenuous physical activity for at least 1 week. Then increase your activity level as tolerated.
- It is normal to experience pain and bruising after your procedure. You can take acetaminophen (Tylenol) for the first 24 hours after your procedure. After 24 hours, you may switch to aspirin, ibuprofen (Motrin) or naproxen (Aleve) if acetaminophen is not adequately decreasing your pain.
- Contact Radiology or your ordering clinician if you have any concerns or experience any of the following: severe pain not responding to medications, significant pain or swelling at the procedure site, coughing up an increasing amount of blood, signs of possible infection (significant redness or purulent drainage from the procedure site, severe pain, or high fever), shortness of breath and/or chest pain that is worse than normal for you, dizziness or lightheadedness when standing or a faster than normal heart rate. Call 911 in the event of an emergency.
- Weekdays 8 am to 5 pm call 308-8401 (Riverside), 296-3886 (Southside), 602-1360 (Clay) or 691-1297 (St Johns). Weekdays 5 pm to 10 pm or weekends 6 am to 10 pm call 308-8401. If outside of these hours, call the hospital operator at 308-7300 and ask to speak to the Interventional Radiologist on call.

How Do I Receive Procedure Results?

- Results can take up to 5 days (sometimes longer) to become available. Please contact your provider's office to obtain results and for follow-up instructions.