

CT Guided Lung Biopsy

What is a CT Guided Lung Biopsy?

Your doctor has suggested you have a CT Guided Lung Biopsy as part of your evaluation at National Jewish Health. A CT scan takes pictures of the inside of the body. The pictures are more detailed than a typical x-ray. During a CT scan of the chest pictures are taken of cross sections or slices of the thoracic structures in your body.

A CT Guided Lung Biopsy uses real-time CT images to ensure biopsy samples are accurately taken from the desired part of the lung. These biopsy samples are checked for adequacy by a pathologist during the procedure to make sure a diagnostic sample is obtained.

Following the procedure, these tissue samples will be analyzed by a pathologist, and a report will be sent to your doctor. This will help your doctor determine the best treatment plan for you.

How do you get ready for the test?

Planning Ahead:

- You will be called on the telephone by the Radiology PA (Practitioner Assistant) before the test. The PA will give you instructions for preparation and review risks involved with the procedure.
- You need to have recent blood work. Talk with you doctor about this before the test.
- Prior to a needle biopsy, talk with your doctor about all the medicines you are taking, including herbal supplements. Tell your doctor if you have any allergies, especially to anesthesia.
- There may be certain medicines which you will need to stop taking. The Radiology PA and/or your doctor will tell you about these. Your doctor may advise you to stop taking aspirin or a blood thinner before your procedure.
- Arrange for a companion (family member or friend) to pick you up after your test. You will not be able to drive or take a taxi home.

The Day of the Test:

- Do not have anything to eat or drink after midnight, the night before the test.
- If you are diabetic, please bring your blood glucose monitor and medicine, including insulin.
- Inform your doctor about recent illnesses and other medical conditions.
- Please check-in when you arrive at National Jewish Health. A nurse from MIDC (Minimally Invasive Diagnostic Center) will come and get you.

What is done during the test?

The nurse will explain the procedure to you before you start. Ask questions if you don't understand. Before the test you will need to remove all clothing and jewelry from the waist up. You will be given a hospital gown to wear. The nurse will start an IV. You will feel a skin prick when the IV is started. The nurse will take you to Advanced Biomedical Imaging (Radiology).

You will be monitored closely during the procedure. An EKG will monitor your heart rate. A blood pressure cuff may be placed on your arm to monitor your blood pressure. A pulse oximeter will be placed on your finger to monitor the oxygen level in your blood. You may receive oxygen through a nasal cannula.

You will be asked to lie on the CT scan table. The technologist will give you instructions during the test. You will be asked to hold your breath for 10 to 12 seconds several times. Throughout the exam, you will be asked to take in the same amount of air each time when holding your breath.

After an initial series of CT images are taken, part of your skin will be exposed at the chest. Your skin will be cleaned, and a sterile drape placed over the area. A local anesthesia will be used to numb the skin. This will cause a “sting” which will subside quickly. After the skin is numb, biopsies will be taken of the lung. You will need to lie still throughout the procedure.

Using imaging guidance, the doctor will insert the needle through the skin, advance it to the site of the **nodule** and remove samples of tissue. Several samples may be needed for complete analysis. As the biopsies are obtained, a pathologist will quickly review the samples to ensure that the samples are good. When all the necessary samples are obtained, a small bandage will be applied to the skin.

What should you do after the test?

- You will be monitored by a nurse for about 4 hours after the procedure. You will need to lie on one side on a bed during this time. Chest x-rays will be taken after the test and reviewed by a Radiologist prior to your release.
- A companion (family member or friend) will need to pick you up after the biopsy. You will not be able to drive or take a taxi home after the test. Avoid driving on the day after the test also.
- Do not exert yourself physically (such as heavy lifting, extensive stair climbing, sports, etc.) the night of and for one full day following your biopsy. On the second day, if you feel up to it, you may return to your normal activities.
- If you are considering air travel soon after the biopsy, consult your doctor.

How long will the test take?

A CT Guided Lung Biopsy takes about 4 1/2 – 6 1/2 hours. This includes about 30 minutes to prepare for the test, 1 – 2 hours for the test and about 4 hours for recovery.

How do you get to your test?

If you are being seen at National Jewish Health, on the day of your scheduled test, check in at the Front Desk. A nurse from MIDC will come get you. If you have questions you can contact Advanced Biomedical Imaging (Radiology) at 303-398-1611. Also, if you need to cancel the appointment please call.

Visit our website for more information about support groups, clinical trials and lifestyle information.

PTE.234 © Copyright 7/2010

NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.