

## CT: Guided Biopsy of Organs and Lymph Nodes

### *About your procedure*

*This handout explains a CT-guided biopsy of organs and lymph nodes. It includes how to prepare for it, what to expect during and after your procedure, and how to get your results.*

### **What is a CT-guided biopsy of organs and lymph nodes?**

CT stands for *computed tomography*. A CT scan uses a special X-ray machine to take detailed pictures of the body's organs and tissues.

In a *biopsy*, a small piece of tissue is removed from your body. This tissue sample is then examined in the lab.

A *needle biopsy* is the safest and easiest way to remove this tissue from your body. To do a needle biopsy, the radiologist will insert a needle through your skin and into your tissue. A syringe or an automated needle may be used to take the tissue sample.

### **How does it work?**

For the scan, you will lie inside the CT machine. Many X-ray beams will be passed through your body as the X-ray tube revolves around you. The machine will take pictures from many angles, forming cross-section images (*slices*) of the area. Your doctor will view these images on a computer.

During a CT-guided biopsy, you will need to hold still on the CT table for up to 1 hour or more.

### **How should I prepare?**

- If you have diabetes and take insulin, talk with the provider who manages your diabetes.



*A CT technologist will help you get into position on the CT table.*

You may need to adjust your insulin since you will not be able to eat for 6 hours before the CT scan.

- If you normally take aspirin or other *anticoagulant* medicine (blood thinners), follow the instructions for **not** taking it that the Imaging Services scheduling staff gave you. They have checked with our clinic doctors about whether you should stop taking the blood thinners before your biopsy.
- Plan for a responsible adult to drive you home after your procedure.
- *Women:* Tell your provider if you are pregnant.

## On the Day of Your Procedure

### At Home

- Eat your regular diet until 6 hours before your scan.
- Except for insulin and blood thinners, take your other usual medicines as prescribed, unless your doctor or the radiology clinic staff has told you otherwise.
- Check with your driver to make sure they can take you home after your procedure.

### At the Hospital

- We will ask you to change into a hospital gown for your procedure. All of your belongings will stay with you during your visit.
- We may ask you to remove hairpins, jewelry, glasses, hearing aids, and any removable dental work that could affect the images.
- *Women:* If there is any chance you may be pregnant, tell the radiologist or CT technologist **before** the scan begins.
- The radiologist who does the procedure, or an assistant, will explain the procedure to you in detail before your biopsy begins. They will describe how the biopsy is done, explain possible problems, and give you instructions and self-care tips for after your procedure. Be sure to ask all the questions you may have.
- You will need to sign a consent form that says you understand what you talked about and that you agree to have this procedure.
- We will check your kidney function before your procedure. If needed, we will give you fluids through the *intravenous* (IV) line that was started before your scan.

## How is the CT-guided biopsy done?

- First, the Radiology nurse will insert an IV line into a vein in your hand or arm. You may receive fluids or medicine through the IV during your procedure. You may also be given a mild *sedative* (medicine to help you relax) through your IV before your biopsy.
- The CT technologist will help you get into position on the CT table. We will use pillows to help you hold the right position for the scan.
- We will use the first few scans to confirm the biopsy area and the safest way for us to reach this area.
- We will then mark the needle insertion site on your skin. We will scrub and disinfect your skin around the insertion site, and put a sterile drape over the area.
- Then we will inject a local *anesthetic* (numbing medicine) at the insertion site. This will numb the area so you do not feel the incision or the biopsy needle.
- Then, a small incision will be made in your skin. The biopsy needle will be inserted through this incision.
- We will ask you not to move or cough during your procedure. We will also ask you to hold your breath at different times. It is very important that you try to hold your breath each time we ask you to. It will ensure that the needle is getting tissue from the right area.
- Your doctor will use the CT image to guide the needle to the correct site and remove a small amount of tissue. We may need to take several tissue samples.
- After all the samples are taken, the needle will be removed.
- After any bleeding has stopped at the incision site, we will place a bandage over it. There will be only slight bleeding. You will not need stitches.
- After your biopsy, you will go to the limited-stay area. There, nurses will monitor you to make sure there are no complications. Most patients stay here for 4 or more hours before they leave.

## What will I feel during the procedure?

- When you receive the local anesthetic, you will feel a slight pin prick from the needle.
- You may feel a burning sensation as the medicine is injected and takes effect. The area will become numb in a short time.

- You may feel some pressure from the doctor's hands or from the biopsy needle itself.

## What should I expect after the procedure?

- Most times, you may remove your bandage the day after your biopsy.
- You may also bathe or shower as usual the day after your biopsy.
- For 24 hours after your biopsy, do **not** do heavy physical exercise such as heavy lifting, a lot of stair climbing, or sports.
- You may return to your normal activities 2 days after your biopsy, if you feel up to it.
- If you plan to travel by air within 24 hours after your biopsy, talk with your radiologist.
- Your biopsy site may be sore as the local anesthesia wears off. It should feel better 12 to 48 hours after your procedure.

## When to Call for Help

Severe bleeding from a biopsy is rare. It occurs in less than 3% of patients (less than 3 out of 100 patients). Some symptoms that might be signs of bleeding are:

- Pain where the biopsy was taken
- Rapid pulse (heart rate)
- Overall weakness
- Pale skin

If you have any of these symptoms, go to the nearest Emergency Room or call 911. Call your doctor as soon as you can.

## Who interprets the results and how do I get them?

The radiologist will send a detailed report to the provider who referred you for your biopsy. It may take a few days to a week, or more, for your provider to get the results from your biopsy. Your referring provider or nurse will talk with you about the results.

You may also read your results on your MyChart page. If you need copies of your images on disc, call 206.598.6206.

You and your provider will decide the next step, such as treatment for a problem, as needed.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC - Montlake Imaging Services: 206.598.6200
- UW Roosevelt Radiology: 206.598.6868
- Harborview Imaging Services: 206.744.3105
- UWMC - Northwest Imaging Services CT: 206.668.2061