

## Ultrasound: Guided Biopsy

### About your procedure

*This handout explains an ultrasound-guided biopsy. Read this handout to learn more about the procedure, how to prepare for it, what to expect during and after your procedure, and how to get your results.*

### What is an ultrasound-guided biopsy?

An *ultrasound* exam uses sound waves to take pictures of your body's organs and tissues. A *biopsy* is the removal of a small piece of tissue, which is sent to the lab to be examined.

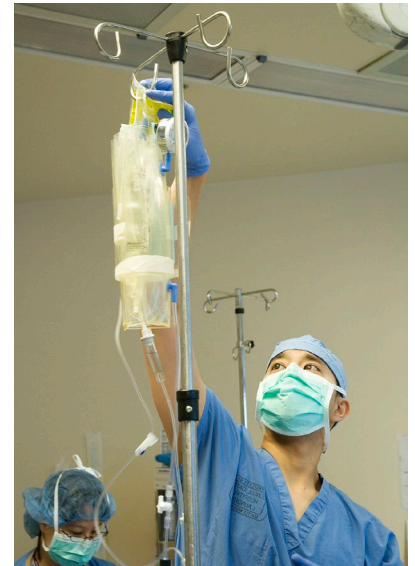
A needle is the easiest way to remove this tissue safely. When a biopsy is guided by ultrasound, it means that your doctor will use ultrasound images to guide the biopsy needle to exactly the right place.

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.

You may have a biopsy of organ tissue, such as the liver or kidneys. Or, you may have a biopsy of muscle or lymph node tissue, or tissue from another part of your body.

### How does the procedure work?

- After gel is applied to your skin, the *sonographer* (ultrasound technologist) presses a *transducer* against your skin. A transducer is a hand-held device that sends and receives sound waves.
- As the sound waves bounce off your body's fluids and tissues, a picture of your tissues is created on a monitor.
- During an ultrasound-guided biopsy, you will lie on a table. You will need to hold fairly still for up to 1 hour or longer.



*For your procedure, the nurse will insert an intravenous (IV) line into a vein in your hand or arm. You may receive fluids or medicine through this IV.*

## How should I prepare for the biopsy?

### Medicines

- If you have diabetes and take insulin, talk with the provider who manages your diabetes. You may need to adjust your insulin dose, since you cannot eat or drink anything for 6 hours before your scan.
- Take your other regular medicines as prescribed by your doctor, unless your doctor or Radiology staff has told you otherwise.
- If you usually take aspirin or another *anticoagulant* (blood-thinning) medicine, follow the instructions our scheduling staff gave you. They have checked with our clinic doctors about whether you should stop taking this medicine before your biopsy.

### Day of Your Exam

- Do **not** eat or drink anything for **at least 6 hours** before your exam.
- Bring a responsible adult with you to take you home after your biopsy. **You may NOT drive yourself home or take public transport by yourself.** You may take a bus, Uber, or taxi if the adult rides with you.

### At the Hospital

- We will ask you to change into a hospital gown before your exam. All of your belongings will stay with you during your visit.
- We may also ask you to remove jewelry, eyeglasses, or anything else that is in the area to be biopsied.
- The radiologist or physician assistant who does the procedure will explain this procedure to you in detail before your biopsy begins. They will describe the way it is done and possible problems. They will also 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 we talked about and that you agree to have this procedure.
- **Tell your radiologist or the sonographer if there is any chance you may be pregnant.**

## How is the ultrasound-guided biopsy done?

- First, the Radiology nurse will insert an *intravenous* (IV) line into a vein in your hand or arm. You may receive fluids or medicine through this IV. You may also receive a mild *sedative* through your IV to help you relax.

- The sonographer will help place you on the ultrasound table. We will use pillows to help you hold the correct position during your exam.
- The first few images will confirm the area to be biopsied and the safest way to reach this area.
- Once we confirm the location of the area to be biopsied, we will:
  - Mark the needle insertion site on your skin.
  - Scrub and disinfect the skin around the insertion site, and put a sterile drape over it.
  - Inject a local *anesthetic*. This will numb the area so that you do not feel the needle.
  - Make a small incision in your skin. The biopsy needle will be inserted through this incision.
- We will ask you not to move or cough while the tissue sample is being taken. We may 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. This will help your doctor get tissue from the right area.
- Using the ultrasound image for guidance, your doctor will direct the needle to the right place and remove a small amount of tissue. Several tissue samples may be taken, but only 1 skin puncture is usually needed. After all the samples are taken, the needle will be removed.
- After any bleeding at the incision site has stopped, we will place a bandage over your incision. Bleeding will be minor. You will not need stitches.
- After your biopsy, you will go to the limited-stay area. There, we will watch you for any problems. We monitor most patients for 4 or more hours before they leave the hospital.

### **What will I feel during the procedure?**

- When you receive the local anesthetic to numb your skin, 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 pressure from the doctor's hands or from the biopsy needle itself.

## What should I expect after the procedure?

- Most patients are told they may remove their bandage 24 hours after their biopsy.
- You may shower as normal the day after your biopsy.
- Do **not** do exercise such as heavy lifting, a lot of stair climbing, or sports activities for 24 hours after your biopsy.
- You may return to your normal activities 2 days after your biopsy, if you feel up to it.
- Talk with your radiologist if you plan to travel by air within 24 hours after your biopsy.
- Your biopsy site may be sore as the local anesthesia wears off. It should start to feel better 12 to 48 hours after your procedure.

## When to Call for Help

It is rare to have severe bleeding after a biopsy. It occurs in less than 3% of patients (fewer than 3 out of 100 patients). Some symptoms that might be signs of bleeding are:

- Pain and swelling 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 provider as soon as you can after getting emergency treatment.

### Questions?

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

- UWMC - Montlake Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.744.3105
- UWMC - Northwest Imaging Services: 206.668.2061

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

The radiologist will send a detailed *pathology* 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 biopsy report. This report gives details about what was found when the biopsy tissue was examined in the lab.

Your referring provider or nurse will talk with you about these results. You and your provider will then decide the next step, such as treatment for a problem, as needed.

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