

**Y**ou or a member of your family has been referred to an interventional radiologist for a needle biopsy. This brochure will answer some of the questions you may have about how and why a needle biopsy is performed.

**For more information on interventional radiology, please contact the Society of Interventional Radiology at 1-800-488-7284 or visit our Web site at [www.SIRweb.org](http://www.SIRweb.org)**

# **INTERVENTIONAL RADIOLOGY Needle Biopsy**



  
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## Questions and Answers about Needle Biopsy

### Q. What is a needle biopsy?

**A.** A needle biopsy is a medical test that can identify the cause of an abnormal lump or mass in your body. A specially trained doctor, known as an interventional radiologist, performs this procedure. Using guided imaging, the interventional radiologist inserts a small needle into the abnormal area and removes a sample of the tissue, which is given to a pathologist, who examines it under a microscope. The pathologist can determine what the abnormal tissue is: a non-cancerous tumor, cancer, an infection, or a scar.



*The interventional radiologist may use a CT scan to determine the best possible site for the biopsy.*

### Q. Why would I need a needle biopsy?

**A.** The most common reason for a needle biopsy is to identify the cause of an abnormality inside the body. Imaging tests, such as mammography, ultrasound, a CAT scan (CT), and magnetic resonance imaging (MRI), can find abnormal masses, but these tests alone do not always determine the problem. The needle biopsy can help determine the cause and give your doctor needed information to provide you with the best care and treatment.

### Q. How do I prepare for my needle biopsy?

**A.** Usually, no special preparation is required. Your doctor will tell you if any special diet or medication instructions are necessary for you.

In most cases, you will be an outpatient when you have a needle biopsy. You will arrive at the radiology department for your appointment time and return home after the procedure. The needle biopsy itself usually takes about an hour.

If you already are a patient in the hospital, your nurses and doctors will give you instructions on how to prepare for your biopsy.

### Q. What is a needle biopsy like? Does it hurt?

**A.** First, the interventional radiologist will use some form of imaging (such as X-ray, CT, ultrasound, or mammography) to determine the best site for the biopsy. Next, a member of the interventional radiology team will wash the area where the needle biopsy is going to be performed and put local anesthetic in the skin and deeper tissues to numb the area. Occasionally, an intravenous line will be started, so you can receive fluids and medicines during your biopsy.

The interventional radiologist will then use X-ray or other imaging to guide a small needle into the mass or lump. You may feel some pressure during the procedure.

The radiologist will use the biopsy needle to remove a tiny piece of tissue or some cells from the abnormal area. The tissue sample is sent to a doctor called a pathologist, who will examine it under a microscope. Usually, the results of the biopsy are ready in two to three days.

### Q. What happens after the biopsy?

#### Can I go home?

**A.** After your biopsy, you will be asked to stay in the radiology department for a brief time so the staff can make sure you are all right. Most people go home between one and four hours after their biopsy.

Keep physical activity to a minimum for the remainder of the day after your biopsy. The biopsy area may be tender or sore for one to two days.

### Q. What is the benefit of having a needle biopsy?

**A.** Before needle biopsies were possible, biopsy surgery was needed to remove tissue for

examination. Needle biopsies often can answer questions about your health without this surgery.

### Q. What are the risks of having a needle biopsy?

**A.** A needle biopsy has few risks because such a small needle is used. Complications are very infrequent; fewer than 1 percent of patients develop bleeding or infection.

In about 90 percent of patients, needle biopsy provides enough information for the pathologist to determine the cause of the abnormality. Occasionally, you may be asked to return for a second needle biopsy, or a surgeon may need to do an operation to get the tissue sample.

Because everyone is different, there may be risks associated with your needle biopsy that are not mentioned here. The exact risks will be discussed with you in more detail by a member of the interventional radiology team before your procedure begins.

### Q. What is an interventional radiologist?

**A.** Interventional radiologists are doctors who specialize in minimally invasive, targeted treatments performed using guided imaging. They use their expertise in reading x-rays, ultrasound,



MRI, and other diagnostic imaging equipment to guide tiny instruments, such as catheters, through blood vessels or through the skin to treat diseases without surgery. Interventional radiologists are board

certified radiologists that are fellowship trained in nonsurgical interventions using guided imaging. Their specialized training is certified by the American Board of Medical Specialities. Your interventional radiologist will work closely with your primary care or other physician to be sure you receive the best possible care.