Effective Health Care Program

Having a Breast Biopsy

A Guide for Women and Their Families

DEPARTMENT OF HEALTH & HUMAN SERVICES • USA

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Fast Facts

- Most women who have a breast biopsy do not have breast cancer. About 4 out of every 5 breast biopsies are negative for cancer.
- For a breast biopsy, a small amount of tissue is taken out. A biopsy tells if a lump or suspicious area is cancer.
- There are two main kinds of breast biopsies: surgical biopsy and core-needle biopsy.
- Side effects are less common with core-needle biopsy than with surgical biopsy.

Inside

Introduction 1
Finding Breast Cancer 2
What Is a Breast Biopsy? 3
Kinds of Breast Biopsy 3
Research About Breast Biopsy 5
Biopsy Results 6
Questions for Your Doctor or Nurse 7

Introduction

What does this guide cover?

This guide can help you talk with your doctor or nurse about breast biopsies. If you have a breast lump or a suspicious area on your mammogram, a breast biopsy tells if it is cancer. This guide talks about the different kinds of biopsies. It will tell you what to expect if you have a breast biopsy.

This guide covers the research about how well different kinds of biopsies work to find cancer. It also talks about possible side effects. It is based on a government-funded review of research reports about breast biopsy.

What is not covered in this guide?

This guide does not cover a kind of breast biopsy called fine needle biopsy. It was not included in the research review, and it is not used as often. This guide does not talk about breast biopsies for men, because the research did not include men. It also does not talk about treatments for breast cancer.

Finding Breast Cancer

Screening

Screening for breast cancer increases the chance of surviving breast cancer. Screening tests can find cancers before they cause symptoms and when they are most treatable. Two common tests are used to screen for breast cancer.

Mammogram

A mammogram (MAM-mo-gram) is a breast x-ray. It looks for suspicious changes in breast tissue. It can detect cancers even when they are too small to be felt. A mammogram is the best screening test for breast cancer.

Breast exam by your doctor or nurse

This is usually part of a woman's yearly exam. But if you find a breast lump or another change that worries you, don't wait. Make an appointment with your doctor or nurse to have it checked.

Follow-up tests

When a suspicious area on a mammogram or a lump is found, your doctor will probably send you for more tests. Your doctor might send you for another mammogram or a breast ultrasound. These tests tell your doctor if you need a biopsy. Most women who have further tests do not need a biopsy.

Biopsy

If the test results are still suspicious, your doctor will recommend a biopsy.

What Is a Breast Biopsy?

A biopsy is the only test that can tell for sure if a suspicious area is cancer. During a breast biopsy, the doctor removes a small amount of tissue from the breast.

There are two main kinds of breast biopsies. One is called surgical biopsy. The other is called core-needle biopsy.

The kind of breast biopsy a doctor recommends may depend on what the suspicious area looks like. It also might depend on the size and where it is located in the breast.

After the biopsy, the tissue is sent to a doctor who will look at the tissue under a microscope. This doctor, called a pathologist (puh-THOL-o-jist), looks for tissue changes. The pathology report tells if there is cancer or not. It takes about a week to get the report.

Kinds of Breast Biopsy

Surgical biopsy

A surgical biopsy is usually done using local anesthesia (an-ess-THEE-zhuh). Local anesthesia means that the breast will be numbed. You will have an IV and may have medicine to make you drowsy.

The surgeon makes a 1- to 2-inch cut on the breast and removes part or all of the suspicious tissue. Some of the tissue around it also may be taken out.

A radiologist is a doctor who specializes in medical imaging (like x-rays and mammograms). If the suspicious area can be seen on mammogram or ultrasound but can't be felt, a radiologist usually inserts a thin wire to mark the spot for the surgeon before the biopsy.

Core-Needle Biopsy

A core-needle biopsy is done using local anesthesia. The doctor inserts a hollow needle into the breast and removes a small amount of suspicious tissue. The doctor may place a tiny marker inside the breast. It marks the spot where the biopsy was done.

Radiologists or surgeons usually do core-needle biopsies using special imaging equipment.

Ultrasound-guided core-needle biopsy uses ultrasound to guide the needle to the suspicious area. Ultrasound uses sound waves to create a picture of the inside of the breast. It is like what is used to look at the baby when a woman is pregnant. You will lie on your back or side for this procedure. The doctor will hold the ultrasound device against your breast to guide the needle.

Stereotactic-guided core-needle biopsy uses x-ray equipment and a computer to guide the needle. Usually for this kind of biopsy, you lie on your stomach on a special table. The table will have an opening for your breast. Your breast will be compressed like it is for a mammogram.

Freehand core-needle biopsy does not use ultrasound or x-ray equipment. It is used less often and only for lumps that can be felt through the skin.

It is not unusual to feel anxious about having a biopsy. Ask your doctor or nurse what to expect. It may help to talk to your family and friends. You also might want someone to come to your appointment with you.

Research About Breast Biopsy

Accuracy

Surgical biopsies and core-needle biopsies both work well for finding breast cancer. But biopsies are not 100-percent accurate. In a few cases, a biopsy can miss breast cancer.

Surgical biopsies and ultrasound or stereotactic-guided core-needle biopsies have about the same accuracy. Freehand core-needle biopsies are less accurate.

Out of every 100 women who have breast cancer:

- Surgical biopsies will find 98 to 99 of those breast cancers.
- Ultrasound or stereotactic-guided biopsies will find 97 to 99 of those breast cancers.
- Freehand biopsies will find about 86 of those breast cancers.

Side effects

Bleeding, bruising, and infection can happen after a biopsy. Core-needle biopsies have a much lower risk of these problems than surgical biopsies.

Side effects are rare with any kind of *core-needle biopsy*.

- Less than 1 out of 100 women who have a core-needle biopsy have a problem like severe bruising, bleeding, or infection.

Side effects happen more often with *surgical biopsy*.

- Up to 10 out of 100 women who have surgical biopsy get severe bruising.
- About 5 out of 100 women who have surgical biopsy get an infection.

Some medicines, including aspirin, increase the risk of bleeding and bruising. Your doctor will ask you about the medicines you take. You may need to stop some medicines a few days before the biopsy.

Pain

Women who have a surgical biopsy sometimes need prescription pain medicine to control pain after the procedure. Women who have a core-needle biopsy rarely need prescription pain medicine.

Biopsy Results

After the biopsy, the pathologist who looked at the tissue will send the pathology report to your doctor. It will tell if the suspicious area is cancer or not. Your doctor will go over the report with you. Waiting for these results can be difficult. It can take about a week to get the results.

If no cancer is found

If no cancer is found, the biopsy result is called benign (be-NINE). Benign means it is not cancer. Some benign results need follow-up or treatment. Talk to your doctor or nurse about what they recommend.

If cancer is found

If cancer is found, the report will tell you the kind of cancer. It will help you and your doctor talk about the next steps. Usually, you will be referred to a breast cancer specialist. You may need more imaging tests or surgery. All this information will help you and your doctor think through your treatment options.

Take time to think. Most women with breast cancer have time to consider their options.

Make sure to ask your doctor if you don't understand your test results. After going over the results with your doctor, ask for a copy of the pathology report for your records.

Questions for Your Doctor or Nurse

Deciding on a biopsy:

What kind of biopsy are you recommending?

Why are you recommending this kind of biopsy?

Are there any other options?

What are the possible side effects from my biopsy?

How long will it take?

Preparing for a biopsy:

How many days before my biopsy should I stop taking aspirin? Are there other medicines to avoid?

Can I have someone in the room with me?

Do I need someone to drive me home?

Who will give me the results?

When will I get the results?

When my biopsy is benign:

What kind of follow-up do I need?

When should I have my next mammogram?

When my biopsy finds cancer:

What are the next steps?

What are my options for treatment?

Can you tell me about support groups for breast cancer?

For More Information

Visit www.effectivehealthcare.ahrq.gov.

Click on Guides for Patients and Consumers to print a copy of this guide and learn about other conditions.

For free print copies of this guide, call 800-358-9295. Ask the Publications Clearinghouse for AHRQ Publication Number 10-EHC007-A.

For more information about breast biopsy, visit the MedlinePlus Web site: www.nlm.nih.gov/medlineplus/ency/article/003920.htm.

For more information about breast cancer and support, visit the MedlinePlus Web site:

www.nlm.nih.gov/medlineplus/breastcancer.html.

Source

The information in this guide comes from a detailed review of 107 research reports. The review is called *Comparative Effectiveness of Core-Needle and Open Surgical Biopsy for the Diagnosis of Breast Lesions* (2009) and was written by ECRI Institute Evidence-based Practice Center.

The Agency for Healthcare Research and Quality (AHRQ) created the Eisenberg Center at Oregon Health & Science University to make research helpful for consumers. This guide was written by Martha Schechtel, R.N., Erin Davis, B.A., Seth Meyer, M.A., and David Hickam, M.D., of the Eisenberg Center. Women who had breast biopsies helped the Eisenberg Center develop this guide.

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