



PATIENT & CAREGIVER EDUCATION

Breast Needle Localization Before Breast Surgery

This information explains your breast needle localization (LOH-kuh-lih-ZAY-shun) procedure before your breast surgery at Memorial Sloan Kettering (MSK).

About breast needle localization

Breast needle localization is a procedure where a thin wire is placed into abnormal (not normal) breast tissue to mark its location.

During your breast surgery, your surgeon will use the wire to find the abnormal tissue and take it out.

Breast needle localization is also called wire localization.

Before your breast needle localization procedure

Take devices off your skin

You may wear certain devices on your skin. Before your procedure, surgery, or scan, some device makers recommend you take off your:

- Continuous glucose monitor (CGM)
- Insulin pump

Talk with your healthcare provider about scheduling your appointment closer to the date you need to change your device. Make sure to bring an extra device with you to put on after your procedure, surgery, or scan.

You may not be sure how to manage your glucose (blood sugar) while your device is off. If so, before your appointment, talk with the healthcare provider who manages your diabetes care.

The day of your breast needle localization procedure

- Do not put anything on your breasts, nipples, or under your arms. This includes powder, deodorant, perfume, cologne, lotion, and cream.
- Wear a shirt that's easy to take off.
- Follow any other instructions your healthcare provider gave you.

During your breast needle localization procedure

Your breast needle localization procedure will be done during a mammogram, while your breast is compressed (squeezed). A mammogram is an imaging test that takes X-ray pictures of your breast. It will help your technologist see inside your breast to find the abnormal tissue.

If your technologist cannot see the abnormal tissue on the mammogram, they'll use different medical imaging instead. This may be:

- **An ultrasound.** This is an imaging test that uses sound waves to create pictures of the inside of your body.
- **An MRI (magnetic resonance imaging).** This is an imaging test that uses strong magnetic fields to create pictures of the inside of your body.

After your technologist finds the abnormal tissue, your radiologist will get you ready for the needle localization. First, they'll clean the skin on your breast with an antiseptic solution. This is a liquid that kills bacteria and other germs. Then, they'll give you a local anesthetic to numb the area where they'll place the wire. You'll get the anesthetic as an injection (shot).

Once the area is numb, your radiologist will put a thin,

hollow needle into your breast. You may feel some pressure when the needle goes in. Your technologist will then take pictures of your breast using the mammogram, ultrasound, or MRI. The pictures will show if the needle is in the right position, or if it needs to be adjusted.

Once the needle is in the right position, your radiologist will guide a thin, thread-like wire through the needle. They'll place the wire in or around the abnormal breast tissue. The end of the wire has a tiny hook or curve to hold it in place. It will not hurt you or harm your breast tissue. The other end of the wire will be outside your breast.

Once the wire is placed, your radiologist will take out the needle. Your technologist will take another set of pictures to show the exact location of the wire. Later, your surgeon will use these pictures as a map to guide your surgery.

When your procedure is done, your technologist will cover the part of the wire that's outside your body with gauze. They'll tape the gauze to your skin, so the wire does not move. The wire will stay in your breast until your surgery. Your surgeon will use the wire to help guide them to the abnormal tissue.

Your breast needle localization procedure will take about 30 minutes.

After your breast needle localization procedure

If your localization procedure was done during a mammogram

After your procedure, you'll go to the place where you're having breast surgery. You'll have your surgery that day.

If your localization procedure was done during an ultrasound or MRI

After your procedure, you'll have a mammogram to check that the wire is in the right place. When you're done with the mammogram, you'll go to the place where you're having breast surgery. You'll have your surgery that day.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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