Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Radioactive Seed Localization Before Breast Surgery

This information explains your radioactive seed localization procedure before your breast surgery at Memorial Sloan Kettering (MSK).

About breast seed localization

Breast seed localization is a procedure where a tiny metal seed, about the size of a small sesame seed, is placed into abnormal breast tissue to mark its location. It may be done if the abnormal tissue is too small to be seen or felt by hand. The seed contains a small amount of radiation.

During your surgery, your surgeon will use a special tool to find the breast seed and the surrounding abnormal tissue. They will then take the seed and tissue out.

Your doctor will explain the procedure to you and will answer your questions.

Before your procedure

Talk with your healthcare provider

Tell your doctor about all the medications you're taking, including patches and creams. You may need to stop taking certain medications before your breast seed localization procedure.

If you're currently breastfeeding, tell your doctor. You may be able to have a different type of breast seed localization so you can continue breastfeeding.

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 procedure

- Don't put anything on your breasts, nipples, or under your arms. This includes talcum powder, deodorant, perfumes, colognes, and creams.
- Wear a shirt that you can remove easily.
- Tell the doctor performing your procedure if you're allergic to any medications.

During your procedure

Your breast seed localization procedure will be done during a mammogram while your breast is compressed or during an ultrasound if it's easier to see the tissue with ultrasound.

First, your doctor will take a picture of your breast using mammogram or ultrasound. Once they see where the abnormal tissue is, they will give you an injection (shot) of local anesthetic (medication to make an area numb) close to the area.

After the area is numb, your doctor will insert a needle with the seed inside of it

into your breast. After inserting the needle, they will take more pictures of your breast. If needed, the position of the needle will be changed and more pictures will be taken.

When the needle is in the right place, the seed will be placed into the tissue and your doctor will remove the needle. The seed will stay in your breast until your surgery. You will have another set of pictures taken to show the exact location of the seed. Later, your surgeon will use these pictures as a map to guide your surgery.

If your breast seed localization was done during an ultrasound, you'll have a mammogram right after your procedure. This will help your surgeon see where the seed is.

The spot where the needle was inserted will be covered with surgical tape (such as Steri-Strip™) and a small bandage (such as a Band-Aid®) will be placed over the surgical tape.

Before showering, remove the bandage but leave the strips on your skin. Follow your surgeon's instructions for showering. Your surgeon will remove the strips for you.

Your breast seed localization procedure will take about 30 minutes.

After your procedure

- Don't hold a baby, child, or young animal against your chest for any longer than 30 minutes per day for the next month (30 days) or until the seed is removed during surgery.
- The items you touch and clothes that you wear won't become radioactive. People who are in close physical contact with you may be exposed to very small amounts of radiation. There isn't any evidence that this exposure is harmful.

If you have any questions or concerns, please contact the Radiation Safety Service in the Department of Medical Physics at 212-639-7391.

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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