

Needle Localization

What is needle localization?

Needle localization is a procedure used to mark an area of abnormal breast tissue that was found on your mammogram and/or ultrasound. This area of abnormal breast tissue usually cannot be felt by you or your healthcare provider. A radiologist will place a wire in your breast to guide your surgeon to the exact location of the abnormal breast tissue. Needle localizations may be done either using mammography or breast ultrasound. The radiologist will make a recommendation to your surgeon which technique would be the best approach for you.

How do I prepare for a needle localization?

Your surgeon will provide you with pre-surgical instructions. Do not apply any lotion, powder or deodorant to your breast or underarm area the day of surgery.

What can I expect during an ultrasound-guided needle localization?

Ultrasound uses high frequency sound waves to image internal structures of your breast. You will be positioned on your back or slightly turned to your side for the procedure. A nurse and ultrasonographer will assist the radiologist with the procedure. A warm, gel-like substance will be applied to your skin. The gel helps the sound waves travel through the breast for a better image of the breast tissue. The ultrasound probe or transducer is placed on the gel and moved over the breast to locate the area to be biopsied. When the area has been located, it will be cleansed with hospital soap. The doctor will inject local anesthetic into the breast. This anesthetic is similar to what is used in the dental office. A needle is inserted into the breast. The radiologist will guide the needle to the area by constantly tracking it on the monitor screen. Once the needle is placed, the location is marked by injecting blue dye into the tissue through the needle. This serves as a visual guide for the surgeon. A thin wire is inserted through the needle into the breast tissue. After the wire is in place, the needle is removed. A mammogram is done to check the final wire placement. These films will go with you to surgery. After the radiologist has verified the final mammogram, the wire will be covered and taped in place. The breast and bone health nurse will accompany you back to your pre-surgical room.

What can I expect during a mammography-guided needle localization?

You will be positioned either in a standing or sitting position. A nurse and mammography technologist will assist the radiologist with the procedure. The mammography technologist will place your breast in compression using a specially designed compression plate. The compression is less than when having a regular mammogram. An x-ray will be taken to locate the exact area to be biopsied. The area will be cleansed with hospital soap. The doctor will inject local anesthetic into the breast tissue before inserting the needle into the breast. This anesthetic is similar to what is used in the dental office. After the needle is placed two x-rays are taken to confirm the location of the needle. Sometimes the needle needs to be repositioned,

as precision is vital. Once the needle placement is verified, the location is marked by injecting blue dye into the tissue through the needle. This serves as a visual guide for the surgeon. A wire is inserted through the needle into the breast tissue. After the wire is in place, the needle is removed. A mammogram is done to check the final wire placement. The films will go with you to surgery. After the radiologist has verified the final mammogram, the wire will be covered and taped in place. The breast and bone health nurse will accompany you back to your pre-surgical room.

How will I find out the results?

Your surgeon will inform you of the pathology results. Follow up instructions will be given to you prior to being discharged.