IMAGING: BREAST BIOPSY TESTS

Breast Needle Localization

This procedure helps the surgeon pinpoint the correct area in the breast for a biopsy.

What to expect

- Before the exam:
  There are no pre-exam instructions.

- During the exam:
  For this exam, a marker is placed on the breast at the site of the suspicious area identified by a mammogram or ultrasound. Two mammogram pictures are taken to confirm the location of the suspected abnormality. In most cases, a local anesthetic is used before the insertion of the needle. This is done with a very tiny needle, which may produce a slight sting at the injection site.
  The radiologist inserts a needle at the marked site. Repeat view mammograms are done to check the position of the needle tip. If the needle is not at the lesion, the needle is repositioned and the imaging process repeated. When the tip is in the correct position, a small amount of blue dye is injected through it. The needle is removed or replaced with a wire, and the patient is taken to surgery for the biopsy.
  The exam takes approximately 60 minutes.

- After the exam:
  There are no post-exam instructions.

Stereotactic Breast Biopsy

The role of this procedure is to obtain a tissue sample from the area of abnormality identified on the mammogram or breast ultrasound procedure.

What to expect

- Before the exam:
  There are no pre-exam instructions.

- During the exam:
  For this exam, the patient lies facedown on a special table, and the breast is positioned through a special round opening in the table. The table is elevated so the radiologist, nurse and technologist can work from below. The first part of the procedure is much like a mammogram, except the patient is lying down instead of standing. A confirming X-ray is taken to ensure that the area of the breast containing the lesion is correctly centered in the window. When the position is confirmed, two stereo X-rays are taken. They are called stereo because they are images of the same area from different angles. With the help of the computer, the exact position for placing the biopsy needle is determined from these images.
  Using this information, the physician positions the device that holds the biopsy needle for the correct angle of entry. Next, the physician numbs the biopsy area by injecting a local anesthetic into the breast. This is done with a very tiny needle, which might cause a slight sting at the injection site.
  After the local anesthetic has taken effect, the physician inserts the biopsy needle into the breast. Another set of stereo X-rays are taken to confirm proper needle placement. Once placement is confirmed, the radiologist instructs the patient to hold very still while the tissue sample is acquired. The needle, which now contains the sample, is withdrawn. Several more samples of the area are then taken. When the physician has collected all the samples, the compression is released from the breast. The nurse or technologist will apply pressure to the biopsy site for five to ten minutes to prevent bleeding. The exam takes one and a half to two hours.

- After the exam:
  Afterwards, a dressing is applied and the patient is sent home. The nurse provides post-procedure homecare instructions before sending the patient home.