

WIRE LOCALIZATION UNDER MAMMOGRAPHY OR ULTRASOUND GUIDANCE

Needle wire localization is the placement of a fine wire into your breast before surgery. The wire helps your surgeon to find the exact area of surgery in the operating room.

Mammograms and ultrasound produce pictures that are very detailed. Sometimes small lumps and tissue problems can be seen through these pictures before the surgeon can feel it. Wire localization helps the surgeon accurately find the area of concern during your operation.

A radiologist (doctor who specializes in reading x-rays) will perform your procedure. A trained technologist from the hospital's mammography or ultrasound area will assist the radiologist. The entire procedure takes about 30-45 minutes.

A. Mammography guided procedure:

You will be asked to remove all clothing from the waist up and wear a hospital gown. The technologist will then help to position you in a special biopsy chair, and then position your breast within the mammography machine. You will feel a small amount of pressure applied to your breast while the technologist stabilizes your breast for the procedure. Your skin will be cleaned, and then frozen with local anesthetic. You should experience little or no discomfort.

The radiologist will use one or two small needles to find the area in your breast while two x-rays are taken at different angles to make sure it's the right location. Fine wires are then inserted into your breast through the needles, and the needles are removed. Two more mammogram x-rays will be taken to show the surgeon where the wire is for your operation. Then the wires are taped to your breast and covered with gauze.

B. <u>Ultrasound guided procedure:</u>

You will be asked to remove all clothing from the waist up and wear a hospital gown. The technologist will help to position you on a stretcher in the ultrasound room. Your skin will be cleaned, and then frozen with local anesthetic. You should experience little or no discomfort.

The radiologist uses one or two small needles to find the area in your breast while using ultrasound images as guidance. Fine wires are then inserted into your breast through the needles, and the needles are removed. Two mammogram x-rays will be taken to show the surgeon where the wire is for your operation. Then the wire is taped to your breast and covered with gauze.

<u>C.</u> After the wire localization is completed, you will be taken to the operating room for your surgery.

This procedure is generally well tolerated by patients. Risks of the wire localization are minimal but include: localization failure, migration of wire prior to surgery, pneumothorax (rare), wire fragmentation (rare).