



Birmingham Breast Care
Susan B. Winchester, M.D.

800 St. Vincent's Drive • North Tower - Suite 640 • Birmingham, AL 35205 • 205.930.0806

When a discrete mass is found on your self-exam or by your physician and is felt to be suspicious, a needle biopsy can be obtained for diagnosis. This is called a "percutaneous biopsy" because it is done through a very small incision in the skin under local anesthesia. This can be done on your first office visit if the mass is apparent on exam. This procedure is usually not painful.

If a suspicious nodule, mass or area is felt to be suspicious on mammography, but cannot be found during physical exam, a needle biopsy can also be obtained, disclosing the nature of this area. Biopsy is then guided either by mammography or ultrasound. We cannot use ultrasound to guide needle biopsy of microcalcifications and only mammography can be used to guide this biopsy. The percutaneous breast biopsy methods are listed below:

1. **Stereotactic Breast Biopsy ("Mammotest").** This method utilizes mammography and a computer to indicate the location of a suspicious nodule, mass or area of calcification. Coordinates for the suspicious area are determined by a computer, and a probe is precisely positioned to sample this abnormality. Multiple automated contiguous core samples can then be taken with one insertion of this probe. This method is very accurate for the diagnosis of an abnormality and is a minimally invasive approach. As most abnormalities found on the mammogram are benign, this is highly effective for determining their nature and avoids an open surgical biopsy.

2. **Ultrasound.** Ultrasound can also be used to visualize a suspicious mass. Initially, we evaluate whether the mass is a cyst which has virtually no malignant potential or a solid nodule, (if there is an uncertainty as to whether it is a cyst or solid) a small needle can be placed directly within the nodule under ultrasound guidance using local anesthesia. This is virtually pain free, as we use local within the skin prior to inserting the needle. If fluid is not obtained from the nodule or mass, this is called a "dry aspirate" and the nodule will remain. We can then use a larger cut needle to actually obtain tissue from the nodule and determine the diagnosis. This can be done in the office on your first visit as long as the ultrasound can detect the abnormality that has been found. Microcalcifications, however, cannot be biopsied with this method and require stereotactic breast biopsy or biopsy guided by your mammogram.

Increasingly, these methods of "sampling" suspicious areas on mammograms are being used. These methods are quick, do not require general anesthesia, and are generally not painful. *However, both methods require close follow-up because the nodules or calcifications are not being removed.* If the nodule markedly increases in size, changes appearance, or if the microcalcifications show up in increasing numbers on a follow-up mammogram four to six months following biopsy, the area may require surgical removal.

Ultimately, the biopsy may be performed in the operating room if there is any doubt regarding the needle biopsy results, or if the patient prefers the area be removed. If the surgeon cannot find the mass on clinical exam and if microcalcifications are present, needle localization is completed by the radiologist and the patient is then brought to the operating room. An excisional biopsy is then completed under general anesthesia. The patient can go home a few hours later.

Susan B. Winchester, MD

"Caring for patients' body, mind and spirit."

www.birminghambreastcare.com