

Breast biopsy guidelines

Policy

No reimbursement for diagnostic breast biopsy without preliminary image evaluation.

Reimbursement for cytology will be limited to those cases of image guided aspiration of cystic masses with visualized suspicious aspirate.

Rationale

The work up of a patient with a solid dominant mass should include a diagnostic mammogram and may include ultrasonography (page 3 and 4, Evaluation of Common Breast Problems). Imaging should be performed before aspiration as FNA may produce bleeding that can cause difficult in interpreting the mammogram or ultrasound (page 4, Evaluation of Common Breast Problems). In addition, the false negative rate for FNA may be as high as 20%(page 4, Evaluation of Common Breast Problems.) and therefore, if negative, it cannot be utilized as a final arbiter of suspicious breast lesions.

I. Palpable Lesions

Palpable lesions can be subdivided into those that can or cannot be visualized and characterized with mammography or breast ultrasound. All palpable lesions with negative mammograms should be evaluated with breast ultrasound to characterize the palpable abnormality and evaluate suitability for ultrasound guided core biopsy.

A. Palpable Lesions Not Visualized by Mammography or Ultrasound

A discrete solid breast mass with negative mammogram and ultrasound should be referred to a surgeon to be considered for excisional biopsy of the palpable mass. An area of thickening that is not a discrete mass and judged to be consistent with fibrocystic change, adenosis or other non-malignant conditions with negative mammogram and breast ultrasound should be considered for core biopsy of the palpable abnormality by a surgeon or other breast specialist with training or experience in use of non-image guided core biopsy in the management of breast lesion. Those patients with negative pathology should be followed closely (2-4month intervals) until resolution or excision.

B. Palpable Lesions Visualized by Mammography or Ultrasound

Breast lesions visualized by either mammography or breast ultrasound can be divided into three categories: simple cyst, complex cyst or solid lesion.

1. Simple Cyst (Palpable)

The ultrasound criteria for simple cyst is (page 6, Evaluation of Common Breast Problems).

- a. Round or oval shape
- b. Sharply defined margins

- c. Lack of internal echoes
- d. Posterior acoustic enhancement

If the above criteria can be met, then a diagnosis of benign simple cyst can be made. Simple cysts do not need further diagnostic evaluation but aspiration may be warranted for symptomatic relief.

If a palpable lesion seen on mammography or ultrasound is not a simple cyst, then by default it must be a complex cyst or solid lesion. These lesions are in need of further evaluation with diagnostic biopsy.

2. Complex Cyst (Palpable)

Those lesions visualized on mammography and not on ultrasound (rare) should be considered for non-image guided aspiration. If no benign cyst fluid or semi-solid material is obtained, then non-image guided core biopsy or excisional biopsy of the palpable abnormality should be considered.

Those lesions seen on ultrasound can usually be resolved with aspiration. Ultrasound guidance for aspiration is quite helpful in this situation. If the problem is not solved with aspiration, then ultrasound guided core biopsy should be the next consideration. If the problem still is not solved, then excisional biopsy of the palpable abnormality should be considered.

3. Solid Lesions (Palpable)

Those lesions visualized by mammography but not by ultrasound should be considered for non-image guided core biopsy or excisional biopsy of the palpable abnormality.

Those solid lesions visualized by ultrasound should first be considered for ultrasound guided core biopsy. Ultrasound guidance is quite helpful to insure that the appropriate area is sampled. If an appropriate diagnosis is not forthcoming with ultrasound guided core biopsy, then excisional biopsy should be considered.

II. Non-Palpable Mammographic Lesions

All suspicious mammographic lesions identified on screening mammography should be evaluated with diagnostic studies before a decision to perform a biopsy. These may include spot compression views, magnification views, breast ultrasound and other special x-ray views as deemed necessary by the radiologist.

Non-palpable mammography abnormalities can be divided into three broad groups: suspicious microcalcifications (non-palpable) without associated mass lesion, suspicious microcalcifications with associated mass lesions (non-palpable) and suspicious density or mass lesion (non-palpable).

A. Suspicious Microcalcifications without Associated Mass (Non-Palpable)

Biopsy options should include stereotactic core biopsy or needle localized excisional biopsy. Since 80% of these lesions will be benign (page 4, Evaluation

of Common Breast Problems) the less expensive stereotactic procedure should be considered the first line procedure in this instance.

B. Suspicious Microcalcifications with Associated Mass (Non-Palpable)

Biopsy options include ultrasound guided core biopsy stereotactic biopsy or needle localized excisional biopsy. The least expensive approach in finalizing the diagnosis should be used. If lesions can be visualized with ultrasound, then ultrasound guided core biopsy would be the procedure of choice. If not seen at ultrasound, then the next most economical procedure would be stereotactic core biopsy.

C. Suspicious Density or Mass Lesion (Non-Palpable)

1. Suspicious Mammographic Mass Lesion (Non-Palpable) Not Visualized on Ultrasound.

Biopsy options include stereotactic core biopsy vs. needle localized excisional biopsy. The more cost effective stereotactic core biopsy should be the first option in this instance.

2. Suspicious Mammographic mass Lesion (Non-Palpable) Visualized on Ultrasound.

These lesions can be divided into three categories: simple cyst, complex cyst, or solid lesion.

a. Simple Cyst

The ultrasound criteria for simple cyst (page 6, Evaluation of Common Breast Problems) is:

1. Round or oval shape
2. Sharply defined margins
3. Lack of internal echoes
4. Posterior acoustic enhancement

Simple cysts do not need further diagnostic evaluation but aspiration may be warranted for symptomatic relief.

If the lesion is not a simple cyst, then by default it is either a complex cyst or solid lesion. These lesions are in need of further evaluation with diagnostic biopsy procedures.

b. Complex Cyst (Non-Palpable)

These cases can usually be resolved with ultrasound guided aspiration. If the diagnosis is not clarified, and then ultrasound guided core biopsy would be the next most economical procedure.

If appropriate diagnosis is not forthcoming, then the more cost effective stereotactic core biopsy would be the next option with the final option being localized excisional biopsy.

c. Solid Lesion (Non-Palpable)

Those solid lesions visualized by ultrasound should first be considered for ultrasound guided core biopsy. If appropriate diagnosis is not forthcoming, then the more cost effective stereotactic core biopsy would be the next choice. If the problem is not solved, then needle localized excisional biopsy should be considered.

Referenced: Evaluation of Common Breast Problems: A Primer for Primary Care Providers Center for Disease Control and Prevention, August 1995