

CHAPTER

4

Diagnosis and Referral

An abnormal clinical breast screening examination or mammogram should generate a referral to a surgeon or physician with expertise in breast problems. A normal mammogram does not rule out cancer if a patient has a mass discovered through clinical breast examination.

Management of Palpable Masses

Solitary, Well-Defined Palpable Mass

Patients with discrete palpable masses should be referred to a surgeon or a physician with expertise in breast evaluation.

It is appropriate to order a diagnostic mammogram concurrently with referral to a surgeon for a patient over 35 years of age with a palpable mass. The mammogram will define characteristics of the mass and look for non-palpable synchronous lesions in either breast. Even if the mammogram is negative, the patient with a palpable mass should still be referred for further evaluation.

Fine needle aspiration (FNA), core biopsy and open excisional biopsy are among the options available to the consultant for further work-up of the mass.

Most palpable masses are removed regardless of a patient's age. This applies both to lesions suspicious for cancer and to lesions thought to be benign. If a lesion appears benign on a mammogram and FNA/biopsy, a patient in consultation with her health care provider may elect to have the mass removed or to be followed closely without removal. For many patients, a mass may cause continued concern and anxiety if it is not removed. Other patients may choose to monitor a mass that appears benign rather than to have it immediately removed.

Many "palpable masses" perceived by the patient are not considered palpable masses by the health care provider or surgeon. The range of abnormalities which women feel and call a "palpable mass" is wide. The health care provider may feel this area only as slightly lobulated breast tissue (particularly when the exam is before menstruation); as an area of diffuse poorly defined thickening which may or may not match in the opposite breast; or as an area of irregularity or prominence (such as nodular breast tissue).

If the provider does not feel a dominant mass, but the patient remains concerned or anxious, it is sound practice to advise her to return monthly or bi-monthly for re-examination until she is reassured of the benign and functional nature of the changes. In menstruating patients, time return visits between menstrual cycles (1–2 weeks after the menses is completed). If significant doubt exists in the patient's or physician's mind about the

nature of a non-discrete “mass” the patient may be referred to a surgeon or physician with expertise in breast evaluation for a second opinion.

Discomfort and pain are not reasons to assume that the lesion is benign. While painful or tender areas in the breast are usually functional in nature, health care providers should exercise caution to avoid being falsely reassured, as some malignant lesions may cause pain and tenderness.

Cysts

It is difficult to assess whether a mass is cystic or solid by palpation alone. Fine needle aspiration or ultrasound may be helpful in identifying a cystic lesion.

If the primary care physician does not routinely perform aspirations, referral to a surgeon is appropriate. If a cyst is aspirated and the fluid is non-bloody, the patient should be re-examined for cyst recurrence at approximately 4 to 6 weeks. Rapid recurrence of a cyst after aspiration should lead to surgical referral. Routine ultrasonography is not indicated in such patients. Ultrasound is most useful if there is an abnormality detected on the mammogram which is not palpable. Ultrasound can help determine if the lesion is cystic or if it is solid.

If a patient is over age 40, obtain a mammogram prior to cyst aspiration. A cyst aspiration can make interpretation of the mammogram difficult, particularly if a hematoma develops.

If the mass does not disappear completely with aspiration or if the aspirated fluid is grossly bloody, the fluid should be sent for cytologic analysis and the patient referred to a surgeon. Cyst fluid does not otherwise need to be analyzed.

Solid Masses

If no fluid is obtained on aspiration or if the ultrasound does not show a cyst, the mass is most likely solid.

Solid masses require further evaluation by a surgeon. Options for further work-up include core biopsy and excisional biopsy. Choice of work-up is determined by the surgeon and may be influenced by the patient's age, degree of suspicion for cancer and personal preference.

Vague Thickening or Nodularity Not Suspicious of Cancer

For premenopausal patients with thickening or nodularity, re-examine at mid-cycle after one or two menstrual cycles. If a localized area remains abnormal after two examinations, refer to a surgeon.

Questionable areas in a postmenopausal patient, including those postmenopausal patients on estrogen replacement, should lead to a referral to a surgeon for consideration of fine needle aspiration or biopsy. The role of fine needle aspiration under these circumstances has not been completely established. Referral to a surgeon is the preferred approach.

It is appropriate to order a diagnostic mammogram before referral to diagnose synchronous lesions in any patient over age 35 that has not had a mammogram within 6 months to a year.

Nipple Discharge or Skin Changes

The nature of the nipple discharge should be defined by a careful history. A patient with a spontaneous, unilateral clear, serous, or bloody discharge should be referred to a surgeon. Cytologic analysis of nipple discharge is rarely useful and should not be performed.

Bilateral multiple duct discharge is almost always benign. Medical work-up of galactorrhea may be appropriate for profuse, persistent milky discharge, but pituitary adenomas are rare.

Patients with skin breakdown on the nipple-areola complex should be referred to a surgeon. Biopsy of the nipple may be indicated to differentiate eczema or other dermatological conditions from Paget's disease.

Breast Pain

Breast pain, in the setting of a negative physical examination and mammogram, is most likely due to fibrocystic or functional changes. An explanation of the role of hormonal cycling will reassure most patients. A trial of non-narcotic analgesics such as acetaminophen, aspirin, or ibuprofen and the use of a bra which provides good support are suggested. Elimination of caffeine, chocolate, or salt from the diet has not been found to be beneficial in scientific studies. However, some patients report a decrease in cyclical pain with reduction of caffeine, and this may be suggested. There is no role for male hormones or vitamin therapy. Refer to a surgeon if there is persistence of localized pain not responsive to conservative measures.

Management of Non-Palpable Masses

The American College of Radiology designates five categories for mammogram reports. These include:

- I. Negative
- II. Benign Finding
- III. Probably Benign or Equivocal
- IV. Suspicious Abnormality
- V. Highly Suggestive of Malignancy

A patient whose mammogram is read as a I or II requires a follow up screening mammogram at the normal interval, usually in 1–2 years depending on the patient's age. If the mammogram reading is equivocal (III) and the radiologist recommends follow-up versus biopsy, refer to a surgeon or physician who is experienced in breast evaluation. If further mammographic evaluation with spot compression, magnification, or ultrasound is suggested, it is appropriate to obtain these prior to a referral since many equivocal mammographic abnormalities may be resolved with additional radiological work-up. A patient whose mammogram is read as IV or V requires immediate referral to a surgeon for biopsy.

An indeterminate or incomplete screening assessment (Category O) may be reported. Additional evaluation is then recommended before a final opinion can be rendered. An incomplete assessment always requires further action on the part of the patient and the health care provider.

Non-Palpable Cysts

Non-palpable cysts detected by mammography and confirmed by ultrasound as simple cysts (i.e., without debris or ragged walls) need not be aspirated except for relief of pain. A presumed non-palpable cyst found by ultrasound to have suspicious characteristics should be subjected to directed biopsy or aspirated with sonographic guidance. The primary role of ultrasound is to determine the nature (cystic versus solid) of a non-palpable lesion found on the mammogram.

Non-Palpable Masses

A decision about what method of evaluation or biopsy is most appropriate for any given non-palpable lesion discovered by mammography or ultrasound should be made by the surgeon in consultation with the radiologist. Options include:

- Mammographic or ultrasound guided fine needle aspiration biopsy
- Stereotactic core needle biopsy
- Large core biopsy or open surgical biopsy after needle localization

Special Considerations

Pregnant or Lactating Patients with Breast Masses

Physical diagnosis of breast cancer may be extremely difficult during pregnancy or lactation. It is important to refer pregnant women with a breast mass to a surgeon. Approximately 1 in 2,000 pregnant or lactating women has breast cancer.

Persistently Worried Patient with a Negative Work-Up

It is appropriate to refer a persistently worried patient to a surgeon for a second opinion. Further educational resources and support organization referrals may also be offered (see Chapter 5).