



ST. JOHN HEALTH BREAST CARE PROGRAM

STANDARD 1.1. CORE NEEDLE BIOPSY

Standard of Care:

Patients with palpable or image-detected non-palpable breast lesions should be offered a core needle biopsy as the diagnostic procedure of choice. Indications for an image-guided procedure would include:

- Highly suspicious micro calcifications or densities (BIRADS 5) to confirm the diagnosis and facilitate treatment planning;
- Suspicious micro calcifications or densities (BIRADS 4);
- Lesions that are assessed as probably benign findings (BIRADS 3) when there are valid clinical indications;
- Multifocal or multi centric lesions to facilitate treatment planning
- Option for repeat biopsy when the initial biopsy results are discordant with the imaging assessment.

Relative contradictions to the use of a core needle biopsy would include:

- Patient preference;
- Patient factors such as size, morbidity, lesion location;
- Nonpalpable mammographic lesion, which is not amenable to image-guided core biopsy as determined by the radiologist;
- Nonpalpable lesion that mammographically is highly suspicious for cancer (BIRADS 5) and the surgeon or patient do not desire preoperative tissue diagnosis;
- Generally, a lesion previously biopsied by core needle biopsy technique where histology shows atypical hyperplasia, lobular carcinoma in situ, ductal carcinoma in situ or radial scar, or where the imaging findings are not concordant with the histology results. In some cases, it is appropriate to do a re-biopsy by means of a core needle biopsy.

Standard of Practice:

- Physicians should be adequately trained in the performance of this procedure as put forth in the standards of the American College of Surgeons, the American College of Radiology and the American Society of Breast Surgeons.
- Prior to the performance of a core needle biopsy procedure, the lesion should be evaluated completely by means of high-quality imaging, i.e., mammography, ultrasound or MRI.
- Participating clinicians must demonstrate accurate positioning of the sampling or localization device and effective methods of obtaining tissue for analysis.
- Participating clinicians should adhere to a core needle biopsy rate of $\geq 75\%$ prior to definitive breast cancer surgery.

- A determination of concordance must be made by the physician performing biopsy and reported to the ordering physician. A discordant finding would generally require a patient referral for surgical biopsy.

Benefits of Procedure:

- May reduce the number of total surgical procedures associated with a diagnosis;
- Morbidity is lower than that of an excisional biopsy;
- Supports appropriate patient counseling, pre-operative work-up and treatment planning;
- Associated accuracy rate comparable to excisional biopsy;
- Palpable lesions can be sampled as part of an office visit;
- Safe, well tolerated and cost-effective alternative to excisional biopsy.

References:

In most cases, if possible, a needle biopsy is preferred over a surgical biopsy as the first step in making a cancer diagnosis. A needle biopsy provides a diagnosis quickly and with little discomfort. In addition, it gives the woman a chance to discuss treatment options with her doctor before any surgery is done. [National Comprehensive Cancer Network, April 15, 2008]

A major goal of modern breast medicine is to minimize the number of patients with benign lesions who undergo open surgical breast biopsies for diagnosis. Image-guided percutaneous needle biopsy is the diagnostic procedure of choice for image-detected breast abnormalities. It should be readily available to all patients with image-detected lesions. There are relatively few patients for whom excisional biopsy should be the initial procedure for diagnosis. For patients with a diagnosis of breast cancer, the goal is to make the diagnosis with a needle and to go to the operating room one time for definitive treatment. A definitive diagnosis of breast cancer made using a minimally invasive needle biopsy permits optimal preoperative work-up-patient counseling, and surgical planning. This may include a preoperative MRI and provision for the use of intra-operative ultrasound. When a diagnosis of cancer has been made preoperatively, definitive surgery can generally be performed as a single procedure, clear margins are more likely to be obtained, and patients are spared the additional morbidity of a second (or third) surgery. This also results in a substantial cost savings. [The American Society of Breast Surgeons, June 12, 2006]

Reducing the number of diagnostic surgical procedures by substituting less invasive procedures has become possible because of the following advantages of percutaneous procedures: similar accuracy, lower or similar morbidity and lower cost. [American College of Radiology, October 1, 2005]

Needle biopsy is the preferred method of diagnosis of both palpable and nonpalpable breast lesions. [American College of Radiology, 2006]

The percentage of breast cancer patients receiving stereotactic or core needle biopsy should meet the ideal benchmark of 70-75%. [Oncology Roundtable, The Advisory Board Company, 1999]

Attested that this standard was reviewed and approved by the St. John Health Breast Care Advisory Board on: 3/11/09.

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