As a surgeon who specializes in breast, I have been performing ultrasound core biopsies in my office for over 7 years. The primary mode of obtaining core tissue samples was with a 14g biopsy needle. However, I was aware that with vacuum assisted biopsy devices available on the market, there were ways to obtain larger core tissue samples, thereby providing more quantitative information for the pathologist.

While I have tried several of the other vacuum assisted biopsy devices available on the market today, most had one or more complication factors, such as size, price, ease-of-use, and reliability, which made the devices impractical for my practice. However, when I tried the VACORA™ Vacuum Assisted Biopsy System distributed by C. R. Bard, Inc., many of my concerns were addressed. The VACORA™ Biopsy System provided the technology I needed to begin performing vacuum assisted biopsy procedures in my office.

Our first case using the new VACORA™ Biopsy System was on March 25, 2004. In the eight months since we acquired the VACORA™ Biopsy System we have averaged 10 to 12 breast biopsy cases per month. Over half of the biopsies were diagnosed as breast cancer with the remaining being anything from lymph nodes, fibroadenomas, fat necrosis, to benign breast tissue. During a procedure, depending on the type of lesion, anywhere from 2 to 5 cores are taken and from preparation of the biopsy site to the end of biopsy, elapsed time averages 5 to 10 minutes.

One of the great advantages of the VACORA™ System is the contiguous quality and size of the core tissue sample. (Note Figure 1) The reason I can take fewer cores than with a 14g device is that the size of the VACORA™ System sample ranges from 150 to 175 mg. In addition, because the specimen is not pulled through the needle like other vacuum devices, the sample stays very intact and contiguous which is important to the pathologist. The amount of tissue obtained is usually more than adequate for pathology and tumor markers if needed. The larger cores that the VACORA™ Biopsy System provides give me a more secure feeling that the pathologist will get what is needed for diagnosis, thereby helping to avoid the possibility of a re-biopsy.

Additionally, unlike other vacuum-assisted systems, the VACORA™ Biopsy System is completely self-contained. (Note Figure 2) There are no foot pedals, no cords extending out from the handle, and virtually no set up time. The VACORA™ Biopsy System is lightweight and simple to use. One person can easily perform the procedure in a quick and efficient manner.

And while many physicians’ still use 14g for breast biopsy procedures, I was glad to have found a different tool. As compared to 14g biopsy systems, I like the choice of not having to fire the needle to get the sample. There is a choice to “throw” or not on this device so one

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1 Surgical Oncology of the Breast Fayetteville, AR
does not have to worry about biopsying the
tissue 2 cm beyond the target. Additionally, I no
longer have the fear that the needle will not
penetrate hard malignancies, since the
VACORA™ Biopsy System can go nearby or
underneath the lesion to obtain the sample.

I have also found the VACORA™ Biopsy
System to be useful in patients who have a
generalized fibroglandular pattern on exam,
where a fine needle aspiration may not yield
enough confidence. However, a core biopsy
would be safe, accurate, and give assurance that
there is not an underlying malignancy such as a
lobular carcinoma.

USE DURING MRI BIOPSIES

The other advantage of the VACORA™
Vacuum Assisted Biopsy System is that it can be
used during MRI biopsies. Because the
VACORA™ Biopsy System is MRI-compatible
our radiology colleagues use this system to assist
in diagnosing contralateral lesions that are not
seen on ultrasound or mammography.
Minimizing disturbance of the tumor with an
accurate diagnosis becomes paramount in the age
of MRI biopsies looking for extent of disease.
Too much rigorous sampling can lead to a falsely
increase in contrast uptake leading to
miscalculation of the tumor size.

Figure 2
VACORA™ Biopsy System self contained hand-piece
contains the vacuum, all tubing, fluid canister and battery
power source.
CONCLUSION

Therefore, some major advantages of using the VACORA™ Biopsy System for breast biopsy are obviously the larger core tissue samples for pathology. Additionally, using the VACORA™ Biopsy System in the office allows the patient to receive tissue sampling without going to the operating room first for a diagnosis which helps reduce unnecessary scarring and disfigurement. Not to mention, the VACORA™ Biopsy System is also more reliable.

If these were not reason enough to utilize the VACORA™ Biopsy System, there is another large advantage - reimbursement. The reimbursement using this device is 2-3 times more than a 14 gauge approach and increases your profitability by 30% over 14g.

The VACORA™ System also allows vacuum assisted biopsies to be performed in your office which allows physician time to be spent in the private office/clinic performing biopsies and in between procedures seeing new patients. By doing the breast biopsy in the office, wasted time spent waiting for OR time and OR delays can be eliminated. Again, I am usually reimbursed almost twice what I get for an open surgical biopsy when performing an ultrasound guided VACORA™ System biopsy.

RECOMMENDATION

My recommendation for any general surgeon looking to perform breast biopsies in the office under ultrasound is that the VACORA™ Biopsy System is an excellent tool that can be used on all type of breast lesions - regardless of size. The VACORA™ Biopsy System is easy enough to use - even for physicians who have not performed many ultrasound biopsy procedures. The needle is easily seen under ultrasound and the size of the cores provides assurance of optimal tissue sample needed for pathology. And finally, the reimbursement of a vacuum assisted biopsy performed under ultrasound in a private office has certainly made the procedure worthwhile.