

Future Directions

Where do we go from here? As mentioned above, there are still improvements to be made. Difficult case presentations will continue to be the focus, but speakers will be invited to discuss current advancements. Recently, Dr. Gabriel Hortobagyi was invited to speak on Clinical Applications of Genomic Profiles in Treating Breast Cancer. We also presented two current cases with recent genomic testing results. Before that meeting, when Dr. Hortobagyi spoke at another forum, he suggested the creation of a similar Breast Disease Working Group in other parts of Houston. These would be independent groups that could meet every other month as we do, with a planned yearly grand meeting in the Texas Medical Center. That is an ambitious undertaking, and would require others to organize their physician groups and hospitals to make such an event happen. The good news is that, in the northwest Houston area, the ground work has already been established for a collegial, professional, educational—and fun—breast disease working group.

Whether the idea stays local in the area of northwest Houston, or grows throughout the city, the purpose will remain the same. The goal is to improve care of women with breast disease in our community—through collegial communication among, collaboration with, and commitment to this regional meeting. The hope is that, through open dialogue about successes and misadventures, we can avoid the misadventures in the future. That is the sum and substance of the regional conference. In addition, there is a subliminal message or spirit in these conferences, that in working together and sharing our experiences, we fulfill our obligation to our patients to always seek better ways of caring for them. We are making progress in that direction. We will continue this program because it benefits so many people within our reach, both patients and physicians. This achievement is its own reward.

References

1. Available at: <http://www.breastcare.org>
2. Available at: <http://www.mammographyed.com>
3. Lee CZ: "OncoPolitics" in comprehensive breast centers: obstacles & options. *Surg Oncol Clin North Am* 9:279-294, 2000

Developing Interdisciplinary Relationships That Make a Difference

Phillip G. Sutton, MD, FACS

The initial diagnosis and treatment planning of the breast cancer patient's journey represents a critical time when the comprehensive breast center can enhance the communication, collaboration and coordination among the pathologist, radiologist and surgeon. A collegial environment is critical for this to occur. This article describes the co-dependant role among the three specialties - and from the surgeon's perspective, what skills and services are required of radiology and pathology to assure appropriate treatment planning. Among the many issues discussed are the imaging work-up, the clinical breast exam, specimen radiography, specimen processing, triple test correlation, communication of radiology and pathology findings, and patient communication.

Semin Breast Dis 11:11-12 © 2008 Elsevier Inc. All rights reserved.

This series of articles about comprehensive breast centers underscores how the treatment of breast cancer has changed so significantly. Historically, it was the surgeon who diagnosed and treated the breast cancer patient, but the day of the "Lone Ranger" has passed. The ability to provide the highest quality breast care is now dependent on functional, codependent relationships and ongoing communication among multiple breast care specialists. In addition to direct communication among specialists, these relationships are enhanced by the weekly prospective treatment planning conference.

Certainly, the existence and importance of these profes-

sional interactions continue throughout the life of the breast cancer patient, but at no time are they more important than during the time of diagnosis and initial treatment planning. It is imperative that the surgeon recognize and honor his/her dependence on imaging and histology expertise. Development of this codependent synergy is a natural by-product of the interdisciplinary pretreatment conference, the cornerstone of most comprehensive breast centers. This may be a new concept for surgeons who currently are not working in such an organized, focused environment. That being said, what should the surgeon expect from the breast imaging specialist and the pathologist?

Ideally, the breast problem is identified on a screening examination. Screening examination reports should be brief, using BI-RADS categories. Any perceived problem must be addressed

by completion of the imaging work-up (ie, compression/magnification views, ultrasound, and possibly MRI).

Six-month follow-ups without tissue sampling are rarely indicated, and they often result in the patient being referred unnecessarily for a surgical consultation. If a 6-month follow-up is made, the breast imager should personally and clearly explain to the patient the basis of the recommendation.

When highly suspicious calcifications are identified, the patient needs a complete imaging work-up to demonstrate the extent of breast involvement. Magnification views of the nipple often reveal more extensive disease as DCIS travels toward the nipple. Ultrasound may reveal a solid mass not evident on mammography and not associated with calcifications. The breast imaging specialist needs to discuss the extent of malignant calcifications with the patient since this may prohibit breast conservation.

For diagnostic mammograms and imaging work-ups, the surgeon has every right to expect imaging reports that are descriptive, definitive, and directive,¹ not reports that hedge and force the surgeon to either recommend biopsy or take the films to another radiologist for a second opinion, when, in fact, biopsy is not necessary.

A clinical breast examination should be performed by the breast radiologist and documented before any core biopsies are performed. Many "image-detected lesions" are also palpable, and a hematoma after biopsy may obscure physical findings. Omitting the clinical breast examination because the radiologist is "not trained to perform a clinical breast examination" is not an acceptable excuse. Touching the patient is an integral part of the complete imaging evaluation. In addition, the patient should be told at the time of biopsy when to expect the results of the pathology report.

The purpose of needle core biopsy is to establish a histological diagnosis. Complete removal of small lesions before establishing a histologic diagnosis should be avoided. The need for adjuvant chemotherapy often depends on the size of the cancer, and complete removal of a subcentimeter cancer may render precise tumor measurement impossible.

When guidewires are placed for localization, they should be oriented to compliment the planned incision. This doesn't happen by accident; it requires good communication between the surgeon and the radiologist. The skin over an ultrasound-imaged lesion should be marked with ink at the time of guidewire placement. Because many surgeons are trained to use intraoperative ultrasound, using sonographically detectable markers at the time of stereotactic core needle biopsy is preferred.

Specimen radiographs should be obtained in two views at right angles. Margins should be discussed in terms of medial, lateral, etc., not in terms of "closest to the clip." The specimen should never be compressed for specimen radiography since this can narrow the margins. An extra set of specimen radiographs should be available to accompany the specimen to pathology. Use of a Faxitron™ for specimen radiography provides superior imaging, and it significantly reduces wait times if the unit is in the operative suite. Please peruse the

article by Richard L. Ellis, MD in Issue I of this series for a complete view of current state-of-the-art clinical breast imaging and diagnosis.²

On receiving the lumpectomy specimen, the pathologist's review of the specimen radiograph will facilitate processing the specimen. The gross size of the specimen and lesion are recorded in three dimensions. Margins are measured microscopically and specifically identified as to lateral, medial, etc. Touch preps are used to evaluate sentinel lymph nodes. Frozen sections are to be avoided because portions of the lymph node may be destroyed in the process. Sentinel lymph nodes are submitted in their entirety for processing.

When a lumpectomy has been performed for DCIS, the entire specimen must be processed. This is very labor-intensive for the pathologist, but it is the only way to accurately determine the size of DCIS and margin status. A clue to the pathologist's thoroughness is the number of paraffin blocks submitted and the number of slides reviewed. This information should be included in the pathology report. The DCIS is categorized by grade, presence or absence of necrosis, and histologic pattern.

The statement "micro calcifications identified" is inadequate. Were the calcifications associated with malignancy, with benign tissue, or both? This information may impact decisions regarding local therapy.

If mastectomy is recommended on the basis of imaged findings, these must be correlated with the histologic findings. This often necessitates imaging the mastectomy specimen to insure all appropriate areas have been sampled. This requires good communication among the surgeon, the pathologist, and the radiologist.

Since the pathologist always has the last word, the surgeon expects that to be reported in a consistent, synoptic summary of findings. The report must include histologic pattern, tumor size in three dimensions, histologic grade, margin status, lymph node status, hormone receptor status, and status of Her-2/neu oncogene amplification. Please refer to the article by Julio Ibarra, MD, in the first issue of this series for appropriate templates.³

The above examples are not intended as a complete list, but should be viewed as evidence of the codependant and collaborative relationships which exists for all surgeons who strive to achieve excellence in breast care. Additional examples include the relationships with medical oncologists, radiation oncologists, and reconstructive plastic surgeons. Optimizing these relationships is a natural by-product of the interdisciplinary treatment planning conference. Regular, interdisciplinary communication has become an essential component in the diagnosis and individualized management of breast cancer patients.

References

1. Eklund GW: The Radiology Report in Breast Imaging: Optimizing Your Practice & Exceeding the "Standard of Care" (syllabus, Eklund, Carde-nosa & Lee symposium), 1997
2. Ellis RL: Interdisciplinary breast care: essential information for the treatment team. *Semin Breast Dis* 8:10-16, 2005
3. Ibarra JA: The importance of synoptic pathology reports. *Semin Breast Dis* 8:31-34, 2005