

The Multidisciplinary Care of the Breast Cancer Patient: A Role Model for Cancer Care

In earlier times, still within the memory of a few of the more senior oncologists, the care of breast cancer was virtually entirely restricted to the activities of general surgeons, pathologists, and radiation therapists. Medical oncology developed largely because of a void in the care of the cancer patients who developed recurrence or metastatic disease and, over the last few decades, it has become clear that optimal care for the millions of patients at risk for, with, or surviving after breast cancer cannot be effectively provided by a few physician specialists alone. Now, a large variety of physician specialists work in consort with various non-physician team members led by a well-informed and fully involved patient and family.

This issue of *Cancer Control* cannot highlight all the areas of care needed for a patient with breast cancer, but the wide scope of articles — from novel imaging to surgical and pathology management and approaches to specific quality-of-life issues among breast cancer survivors — begins to give some idea of the wide array of resources that a patient with breast cancer requires and deserves.

We recognize that the conventional breast imaging modalities of mammography and ultrasound have limitations, especially in

younger women. Magnetic resonance imaging has some theoretical advantages and in this issue, Christopher Goscin, BS, Claudia Berman, MD, and Robert Clark, MD, review these potential advantages of MRI of the breast over conventional imaging in the areas of staging and treatment planning, enhanced evaluation of the augmented breast, better detection of recurrence, and improved screening of high-risk women. An ongoing multi-institutional study will help to define the appropriate clinical indications for the use of MRI, refine interpretation criteria and the technical requirements for imaging, and address cost effectiveness of the modality.

The technique of sentinel lymph node (SLN) for breast cancer staging is now well established. David Ollila, MD, and Karyn Stitzenberg, MD, comment on the histopathologic detection and clinical significance of SLN metastases. The studies cited by the authors demonstrate that current “gold standard” of single section hematoxylin-eosin (H&E) examination of lymph nodes is inadequate for reliable detection of axillary or SLN metastases. While the article concludes that the clinical significance of finding SLN micrometastases remains uncertain, the American College of Surgeons Oncology Group (ACSOG) Z0010 trial and

the DOD trial based at the Moffitt Cancer Center should determine the significance of micrometastatic disease in the sentinel node vs those found in the bone marrow. Additional predictors of the likelihood of non-SLN metastasis may also be identified in these studies that would allow a subset of patients with a tumor-involved SLN to avoid the morbidity of complete axillary dissection. This concept of obviating the need for complete axillary dissection in patients with positive SLNs is a fertile area for clinical research and is the focus of the Z0011 trial of the ACSOG. Further consensus and definition of the precise histopathologic means by which the sentinel nodes should be evaluated and the ultimate role of immunohistochemical (IHC) staining and more sensitive techniques such as reverse transcriptase-polymerase chain reaction (RT-PCR) are yet to be determined.

Determination of the biologic characteristics of the patient's individual breast cancer is another vital role for the pathologist. Accurate assessment of the tumor HER2 status is part of optimal breast oncology practice. Nils Diaz, MD, reviews this controversial and muddy area. He concludes that screening of breast carcinomas with IHC, with confirmation of weakly positive IHC results by FISH, may be a ratio-

nal strategy for testing HER2/neu as a predictor of response to anti-HER2-targeted therapy.

The impact of SLN procedures on the morbidity from breast cancer surgery is described by Rafael Miguel, MD, and colleagues, who discuss the impact of this procedure on the incidence of referrals to the pain clinic for treatment of postmastectomy pain syndrome (PMPS). Since PMPS is a complication of complete axillary dissection, the increased use of SLN biopsy reduced referrals to the pain clinic for treatment of PMPS. This benefit of SLN biopsy reduces postoperative suffering.

Alan Shons, MD, and Gerard Mosiello, MD, then discuss the current techniques of postmastectomy breast reconstruction. They review the available techniques of breast reconstruction and the effects of reconstruction on patients following surgery for breast cancer. They comment on preoperative consultation, skin-sparing mastectomy, timing of reconstruction, implant reconstruction, autologous tissue reconstruction, and which reconstruction approach is optimal if postmastectomy radiation is used. This is an excellent guide to the current practice patterns of breast reconstruction.

Two thirds of breast cancers occur over age 50, and incidence of this disease is high in the elderly. Lodovico Balducci, MD, and colleagues discuss several issues specific to the management of breast cancer in older women. They examine how aging may influence

the need for postoperative irradiation after partial mastectomy, whether axillary lymphadenectomy is required, and whether primary medical treatment of early breast cancer with tamoxifen can replace more standard approaches. They also review the tolerance and effectiveness of adjuvant chemotherapy. The answers to these questions provide a sound resource for effectively treating the older breast cancer patient.

Finally, Christina Thors, MD, and colleagues describe that sexual problems can be a long-term side effect of breast cancer treatment. They recommend that physicians routinely assess patients for these difficulties and provide guidelines for counseling and/or refer for care.

It is my hope that this partial overview of the multidisciplinary management of breast cancer be viewed in a larger scope rather than being merely a reasonable update of the state of the art of breast cancer care. Perhaps it can serve as a role model for the development of similar multidisciplinary teams to care for other specific cancer types.

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