CORRESPONDENCE

Re: Influence of the New AJCC Breast Cancer Staging System on Sentinel Lymph Node Positivity and False-Negative Rates

The new American Joint Committee on Cancer (AJCC) staging system for breast cancer correctly recognizes that small clusters of malignant cells do not confer the same adverse prognostic impact as larger metastatic deposits (1). The AJCC’s decision to place patients with small clusters of malignant cells in the N0 category rather than the N1 category is rational. Also rational is their use of special substages based on findings from immunohistochemical or molecular techniques to distinguish patients that have otherwise undetectable metastatic deposits from patients with no evidence of disease in regional lymph nodes.

McCready et al. (2) misapply these staging guidelines by examining the impact of their use on the decision about the need for axillary dissection in patients undergoing sentinel lymphadenectomy. The reasonably low false-negative rates for sentinel lymphadenectomy have been achieved because malignant cells are more extensively evaluated in this procedure than in the standard analysis of axillary lymph nodes (3). Reducing the threshold for performing full axillary dissection would be expected to adversely affect the false-negative rate. There is nothing in the AJCC guidelines to suggest that fewer axillary dissections should be performed (4). Rather, the guidelines merely state that if the only evidence of lymph node metastases consists of clusters of tumor cells less than 0.2 mm in maximum diameter, the patient should be classified as pN0. Thus, if axillary dissection is performed and lymph node metastases greater than 0.2 mm are detected, the patient should be classified as pN1. Otherwise, the patient should be staged as pN0.

It is obvious that excluding patients with isolated tumor cells from the pN1 category will reduce the proportion of patients staged as node positive. The pertinent question is how this affects treatment. Axillary dissection or radiotherapy probably improves survival in patients with axillary lymph node metastases (5), and the detection of metastases identifies patients who will benefit more from systemic therapy (6). However, because of advances in pathologic techniques, we can no longer dichotomize patients into the simple categories of lymph node–positive and lymph node–negative. We must use our knowledge and skills to help patients understand the pros and cons of the treatment choices they must make, adding lymph node metastases to the long list of biologic variables that must be analyzed as part of a continuum. The new AJCC staging system appropriately reflects this continuum, but it should not be used as a basis for changing protocols for axillary dissection after sentinel lymphadenectomy.

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REFERENCES


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RESPONSE

The comments from Dr. Atkins support our paper (1) and are appreciated. There is a general agreement that the American Joint Committee on Cancer (AJCC) staging system is appropriate and rational. Whether the current nodal classification will remain static once the prospectively gathered prognostic information from the National Surgical Adjuvant Breast and Bowel Project (NSABP) and American College of Surgeons clinical trials has been analyzed is speculative. Currently, most completion axillary lymphadenectomies for breast cancer are performed when the sentinel node is determined to be positive. The newest AJCC system changed what was once positive in terms of staging and prognosis—micrometastases less than 0.2 mm in diameter—to negative (pN0[i−i+]). It seems reasonable to determine the impact of these new staging definitions on surgical issues because one may indeed question the need to perform a completion lymphadenectomy after resecting a sentinel node that contains isolated tumor cells but is staged as negative. We observed that some patients with sentinel nodal micrometastases less than 0.2 mm in diameter have coexisting, non–sentinel nodal macrometastases (1). Hence, these seemingly inconsequential depositions, from a prognostic and staging viewpoint, need to be considered when planning surgical intervention. Van Zee et al. (2) have published a novel method to help clinicians determine the risk of finding non–sentinel nodal metastases after diagnosing a sentinel node containing metastatic disease. Our paper provided data to conclude, as Dr. Atkins states, that “the new AJCC staging system...should not be used as a basis for changing protocols for axillary dissection after sentinel lymphadenectomy.”

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REFERENCES

(2) Van Zee KJ, Mansasses DM, Bevilacqua JL, Booblol SK, Fey JV, Tan LK, et al. A nomogram for predicting the likelihood of addi-

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