To the Editor:

One of eight women in the United States is at risk of developing breast cancer in her lifetime. Not surprisingly, the probability of breast cancer developing is highest in older women. In older women, breast cancer is the most frequent malignancy; of all patients presenting with breast cancer, 30–50% are aged over 65 years. (1) Data from the surveillance epidemiology and end results (SEER) study reveal that for women 80–84 years of age, the breast cancer incidence is as high as 435 per 100,000 (2). Despite this striking incidence, previous authors have suggested that elderly patients receive inferior screening for breast cancer, as well as inferior treatment once diagnosed. Few previous reports, however, have solely analyzed the octogenarian cohort. The primary study objective was to determine whether or not octogenarian patients present with disease that is more aggressive or different than the younger patient.

A retrospective review was performed of all patients with a diagnosis of breast cancer who were reported in the American college of surgeons’ national cancer data base (NCDB) benchmark reports (3) from 1998 through 2005. The study cohort included all patients 80 years of age and older, and this cohort was compared to a group of younger patients. Data collected included the following: stage at the time of diagnosis; age at the time of diagnosis; histologic tumor type; and, initial treatment performed (breast conservation surgery versus mastectomy).

In the tabulation of data for each parameter evaluated, only those patients with complete pertinent information were included. The stage data were consolidated into “early” (stage I and II) and “late” (stage III and IV) disease in an attempt to optimize power.

The 149,530 cohort patients identified comprised 10.6% of all breast cancer patients reported to the American college of surgeons’ national cancer data base during the study period.

A small, but statistically significant (p < .05) difference in stage at the time of presentation was identified: 15.3% of octogenarians presented with advanced disease (Stage III or IV) versus 13.8% of younger patients.

A statistically significantly greater percentage of octogenarians was treated initially with mastectomy when compared to the control population—39.6% versus 36.9%, respectively. This difference persisted even when all data were controlled for stage.

Breast cancer in the elderly patient—over the age of 80 years—remains a significant problem. The current analysis suggests a reported incidence of 10–11% of all newly diagnosed cases. Although data on this disease in older patients can be limited, the ACS NCDB benchmark reports remain an excellent source of information regarding the nature and treatment of breast cancer in this select group of patients.

Previous authors have suggested that elderly patients with breast cancer receive inferior preoperative evaluation and treatment. Makuc et al. demonstrated that older women were also less likely than younger women to have had a recent clinical examination of their breasts by their physicians or to have been instructed in breast self-examination (4). In addition, elderly patients with cancer are often not only offered less screening but receive less staging than younger age groups (5). Supporting this contention are reports that 98% of women younger than 65 years of age received standard therapy for breast cancer (defined as appropriate use of either lumpectomy, radiation, axillary dissection, or mastectomy), whereas only 81% of patients older than 65 years of age received standard surgical care (6–8). Furthermore, elderly women were less likely to receive adjuvant radiotherapy after a mastectomy, and they have a consequent decreased disease-related 10-year survival, compared with younger patients—32% versus 57%, respectively (8,9).

The current analysis confirms much of this earlier work with regard to breast cancer in the octogenarian.
In this elderly cohort, the current data confirm that breast cancer does present later, although this difference is modest when compared to the younger patient group. This may be a function of the tumor itself (with the elderly demonstrating a more “aggressive” tumor), or it may be secondary to a stage-shift bias related to delayed presentation in the elderly. Surgeons’ reluctance to perform standard surgical procedures in these elderly patients may also bias treatment, based on the assumption that the elderly cannot tolerate surgery. This attitude—if present—is erroneous, however. A general analysis of 4,050 operations of all types showed that the operative mortality rate of patients older than 70 years (4.8%) was similar to that of younger ages (3.4%). (10) With specific regard to breast cancer, when the elderly patient is diagnosed at an early stage and treated with standard surgical treatment, there is a low mortality rate with a comparable survival to that of younger patients (11).

There were several potential limitations to the current study. First, the NCBD is not population based; therefore, no conclusions can be directly drawn from the data regarding true incidence or prevalence. Second, the current analysis does not control for factors other than age that might contribute to differential presentation and treatment rates. Factors such as socioeconomic status, patient education, and physician preference were not taken into account in this study. All of these factors deserve consideration and should form the basis for future analyses. Finally, the data were not stratified geographically, so such factors as regional or geographic variation in presentation were not taken into account.

Octogenarian patients comprise an increasing percentage of all patients diagnosed and treated with breast cancer. The current cancer burden in the elderly must be assessed in the context of the anticipated demographic shift of the population in the United States. It is imperative that the overall diagnosis and treatment of diseases such as breast cancer in this ever-aging patient population be closely examined.

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