



Eric A. Brown, M.D. F.A.C.S.

Premier Surgical Specialist, P.C.

Specializing in Diseases of the Breast

Breast Ultrasound Certified

Member American Society of Breast Surgeons

Member American Society of Breast Disease



Breast Cancer: Treatment of Breast Cancer in Older Women

Highlights of the NCCN 13th Annual Conference, March, 2008

The median age at diagnosis of breast cancer in the United States is 61 years, and currently 35-40 million US women are 65 years of age or older. The number of women ≥ 65 years is expected to double in the next 20 years, and the median age of breast cancer at diagnosis is "almost certainly going to move to the right," reported Robert W. Carlson, MD, of Stanford Comprehensive Cancer Center, speaking on behalf of the National Comprehensive Cancer Network (NCCN) Task Force on Breast Cancer in the Older Woman. He also noted that the likelihood of significant comorbidity increases with age.

Defining the Older Patient

"Should we define older versus younger based on ... age, such as 65 or 70 or 55, or is age really a continuum that's going to vary from individual to individual?" asked Dr. Carlson. Although there was a difference of opinion among the members of the Task Force on the definition of "old", they did conclude that there is no specific age at which someone becomes older and that people age at different rates.

There is a progressive decline in physiologic reserve with aging that becomes most apparent during stress and understanding these physiologic changes can assist in selecting cancer treatments and recognizing potential toxicities from therapies in older patients. "Surgery, chemotherapy, infections all of a sudden uncover our diminished functional reserve as we age", Dr. Carlson observed. However, aging is a heterogeneous process, and factors beyond chronologic age can impact the functional reserve of older individuals, he stated.

To access functional reserve, geriatric assessment tools, defined as multidimensional interdisciplinary patient evaluations, are commonly used. "They allow us to identify and treat comorbidity before it becomes a major problem", Dr. Carlson explained and also "can help us in terms of our therapeutic decision making". Evaluation of social support systems, cognition, nutritional status, and polypharmacy is also possible via these assessments. Although a complete geriatric assessment is a time-consuming endeavor, shorter versions are being evaluated (Hurria A. et al. Cancer 2005; 104:1998-2005), and particular screening questions, such as the "minimal status" exam or the "timed-up-and-go" test, may be very useful in certain settings, he said. "You end up with what is called functional age, rather than chronological age," said Dr. Carlson. The goal of such assessments in this patient population is to maintain patient function and independence, he added.

Systemic Therapy for Older Patients

When trying to determine the benefits of chemotherapy in older patients, "one of the real difficulties is that women enrolled in clinical trials who are older are not representative of

Women overall", he emphasized. This conclusion was echoed in an analysis of several CALB adjuvant breast cancer trials (Muss HB et al. J Clin Oncol 2007; 25:3699-3704). Not only was there a very small percentage of women older than age 70 in these trials, but they also tended to have higher-risk disease and almost certainly were fit patients. Results from the Early Breast Cancer Trialists' Collaborative Group (Lancet 2005; 365:1687-1717) overview of clinical trials indicate that all age groups benefit from chemotherapy, but the benefit declines with increasing age, he stated.

Adjuvant trastuzumab (Herceptin) trials were also evaluated by the NCCN Task Force. Of the more than 14,000 patients enrolled in the National Surgical Adjuvant Breast and Bowel Project (NSABP) B-31/North Central Cancer Treatment Group (NCCTG) N9831 trials, only about 6% were older than 65, Dr. Carlson revealed. Although there is a relative consistency across all age groups supporting the benefits of trastuzumab therapy, he added "the older age group suffers great toxicity".

The increased toxicity in older patients treated for breast cancer was seen in two other relatively recent studies. In CALGB 9762 (Lichtman SM et al. J Clin Oncol 2006; 24:1846-1851), a pharmacokinetic study of paclitaxel in women older than age 55, there was a greater degree of myelosuppression, Dr. Carlson indicated "but surprisingly, they did not see an increased need for hospitalization". In a similar pharmacokinetic study of docetaxel (Taxotere) given every 3 weeks in older patients (ten Tije AJ et al. J Clin Oncol 2005; 23:1070-1077), the older patients (65+ years) experienced more frequent grade neutropenia (63% vs 30%) and febrile neutropenia (16% vs 0%) than did younger patients, although no differences in docetaxel pharmacokinetic parameters were found when the different age groups were compared.

Dr. Carlson offered a list of points to remember when treating older adults with breast cancer:

- Older age is associated with a decreased physiologic reserve.
- Age-related changes in renal and hepatic function should be considered when dosing cancer therapy.
- The serum creatinine level is not an adequate reflection of renal function in an older adult.
- Bone marrow reserve decreases with age.
- Older patients are at increased risk for gastrointestinal toxicity and dehydration.
- The benefits of chemotherapy decline with age, whereas those of endocrine therapy persist.
- Competing causes of mortality and death increase with age.
- Few data are available to balance the above considerations.
- There is a strong need for efficient tools to assess functional and physiologic reserve.

October is Breast Cancer Awareness Month

