Management of Elderly Patients With Cancer

Presented by Arti Hurria, MD

Abstract
Whether a patient is a candidate for cancer therapy goes far beyond the person’s age. To evaluate an older adult for cancer treatment, oncologists must understand the benefits and quantify the risks of the proposed treatment, determine the patient’s decision-making capacity, and make the decision in collaboration with the patient’s preferences and values. In her presentation at the NCCN 18th Annual Conference, Dr. Arti Hurria discussed the major components in the comprehensive geriatric assessment in the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Senior Adult Oncology, focusing on functional (rather than chronologic) age, comorbidities, nutritional status, cognitive impairment, and psychosocial support. By uncovering problems possibly left undetected on a routine history and physical examination, this assessment may lead to interventions that improve health and well-being in older people with cancer. (JNCCN 2013; 11;698–701)

Nearly 70 million Americans will be older than age 65 by the year 2030, and most cancers occur in this age group, proclaimed Arti Hurria, MD, Director, Cancer and Aging Research Program, Department of Medical Oncology, City of Hope Comprehensive Cancer Center, Duarte, California, and Chair of the Senior Adult Oncology Panel of the NCCN. That this demographic is growing signals the need for clearer guidelines to meet the challenges of caring for an older population. This population has been sadly underrepresented in cancer registration trials as well as cooperative group studies.

Dr. Hurria noted several unanswered questions faced by both older cancer patients and their oncologists. For example, oncologists may wonder whether a given older patient with cancer even needs to receive treatment if the cancer is indolent. On the flip side, among those patients who need cancer treatment, the oncologist needs tools to identify which patient is especially vulnerable to treatment toxicity. Furthermore, the goals of cancer therapy may vary in older patients with cancer who may weigh the effect of therapy on the quality of their survival as important or more important as the effect of therapy on the length of their survival.

The possible functional and cognitive impairment associated with cancer treatment weighs heavily on the minds of older patients. For instance, more than 200 older persons with a limited life expectancy due to different diseases were surveyed about their attitudes toward the burden of treatment. Approximately 75% of them would rather die than receive treatment that causes functional impairment, with the rate even higher for cognitive impairment. Although Dr. Hurria admitted that the numbers for a hypothetical question may be higher than in real-life situations, they do illustrate the factors that may enter into decision-making for older individuals.

Chronologic Age: More Than Just a Number

“Chronologic age is a poor descriptor of who an individual is,” declared Dr. Hurria. For example, 2 women aged 80 with high-risk breast cancer may have very different functional abilities, with one closer functionally to age 70 and the other to age 90. And cancer treatment recommendations would be different for these women as well.
The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Senior Adult Oncology include a comprehensive geriatric assessment that can be used to help predict the risk of toxicity from cancer treatment in older patients. Along with age, other factors that can predict both morbidity and mortality in older patients include functional status, comorbid medical conditions, nutritional status, cognitive impairment, and psychosocial support available, revealed Dr. Hurria.

**Functional Status: A Critical Part of Cancer Treatment Planning**

Functional status is not solely linked to age. Independence and ability to care for oneself should be assessed as well. Dr. Hurria reviewed the 2 major types of function through the eyes of a geriatrician: activities of daily living (ADLs) and instrumental activities of daily living (IADLs). ADLs are basic self-care skills such as dressing, bathing, toileting, transfer, continence, and eating. The need for assistance with ADLs is associated with prolonged hospital stay, worsening of function in the hospital, greater home care use, nursing home placement, and death. In the Longitudinal Study on Aging, the need for assistance with ADLs and IADLs was related to the risk of subsequent nursing home placement and mortality.

On the other hand, IADLs are higher order functions required to maintain independence in the community, such as shopping, housekeeping, transportation, laundry, telephone, finances, and medications. “These are the activities your kids needed to be able to go away to college,” explained Dr. Hurria. The need for assistance with IADLs (particularly transportation and medications) is a critical component in cancer treatment planning. In addition, in the MILES study, the need for assistance with IADLs was predictive of survival in older patients with advanced non-small cell lung cancer who were treated with chemotherapy.

The NCCN Guidelines have been updated to include an assessment of fall risk and gait. This performance-based measure of function status is called the Time Up and Go (TUG) test, and Dr. Hurria noted that it can be easily incorporated into an office visit. It consists simply of timing how long a patient takes to stand up from a chair (without using his or her arms), walk 10 feet straight ahead, turn back, return to the chair, and sit down. A normal TUG test score is less than 13 seconds. Above normal scores may signal the need for a comprehensive evaluation.

**Comorbid Medical Conditions and Cancer**

Comorbidities such as hypertension, diabetes, hypercholesterolemia, and osteoporosis, to name a few, increase with age, stated Dr. Hurria. In addition, Satariano and Ragland found that women with primary breast cancer who had 3 or more comorbid conditions had a 20-fold higher rate of mortality from causes other than breast cancer compared with patients who had no comorbid conditions. Furthermore, the authors concluded that comorbidity is a strong predictor of 3-year survival independent of age, stage of cancer, tumor size, treatment, race, and social and behavioral factors.

“Every day in practice when considering cancer treatment for an older patient, we ask, ‘is the patient going to die of cancer or something else,’” revealed Dr. Hurria. “Will other medical problems interfere with our ability to give that patient cancer therapy?”

The NCCN Guidelines mention the use of tools on ePrognosis for assessing life expectancy based on sex, age, and health status. Dr. Hurria acknowledged that the panel had an active discussion regarding whether these tools were ready for prime time among patients with cancer. As a result, the guidelines include the following disclaimer: “These calculators are used to determine anticipated life expectancy (independent of cancer). They should be used in conjunction with clinical judgment.”

Another consideration in older cancer patients is the linear decline of organ reserve, noted Dr. Hurria. For example, renal function is a key factor for those considering cancer treatment. She briefly reviewed several ways to calculate creatinine clearance, concluding that “none is perfect, but all are better than creatinine alone.”

**Food for Thought on Nutrition**

Nutritional variables are a cardinal component of comprehensive geriatric assessment. Unintentional weight loss (> 5% over 6 months) warrants a nutritional screening, stated Dr. Hurria. “Any weight loss isn’t good, but more than 5% weight loss has been
shown to be a predictor of chemotherapy toxicity,” she added. In addition, the simple measure of body mass index (< 22 kg/m\(^2\)) appears to be a predictor of mortality among older people.\(^8\)

Not only are older adults at risk of decreased total caloric intake, they are at risk of progressive impairment in sense of taste or smell and difficulty chewing. “Dentures and mucositis is a hard combination,” Dr. Hurria noted. Problems with the availability of preparation of meals can also be a concern in this patient population. Food diaries are of value to help patients from relying on “tea and toast” meals alone, she added, and support services such as Meals on Wheels may be of benefit.

Cognitive Function: The Key Is Decision-Making Capacity

Cognitive function in older patients has serious implications for cancer therapy, and cognitive as well as social support must be evaluated before starting treatment. Older cancer patients must be able to follow complex directions, take medications on schedule, and recognize toxicity and seek help when needed, Dr. Hurria stated. A family member willing to help can play an essential role.

The number of cases of dementia in older adults is increasing worldwide. Table 1 summarizes some of the differences between mild cognitive impairment and dementia. “The key is decline in cognitive function that is interfering with a patient’s physical function and independence,” clarified Dr. Hurria.

The updated NCCN Guidelines also offer an algorithm on assessing the decision-making capacity in the older adult. (Supportive data on questions for evaluating capacity for decision-making are provided by Sessums et al.\(^9\)) The pathway begins with the question of whether the patient is at risk for dying or suffering from cancer during their projected life expectancy. If the answer is no, symptom management and supportive care are indicated. If the answer is yes, assessment of decision-making capacity is recommended. Patients have decision-making capacity if they are able to 1) understand the relevant information about proposed diagnostic tests and treatment, 2) appreciate the situation, 3) use reason to make a decision, and 4) communicate their choice. Dr. Hurria recommended that information derived from this assessment should be documented in the medical record.

Psychosocial Support: The Benefits of Not Going It Alone

Social support can significantly affect a person’s psychological state, regardless of whether he or she has cancer or not. However, social connections may be even more critical to older patients being treated for cancer.\(^10\) Furthermore, the loss of physical function may predict distress in older patients with cancer.\(^11\) Thus, part of the comprehensive geriatric assessment is a psychosocial evaluation. “This is the patient population where we especially welcome the family member or the friend, as they provide support for patients,” encouraged Dr. Hurria.

Although many losses accompany the aging process, there are some gains as well, Dr. Hurria said. Older patients may cope better than younger patients, as they may have fewer competing demands (such as working full time or raising a family). Having survived an assortment of both medical and life events over the years, older patients may have different health expectations and perhaps have become more adept at handling stress than their younger counterparts.

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<thead>
<tr>
<th>Table 1  Mild Cognitive Impairment Versus Dementia</th>
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<tr>
<td>• Mild Cognitive Impairment:</td>
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<tr>
<td>- Cognitive impairment that does not meet the criteria for dementia</td>
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<tr>
<td>- Measureable deficit in at least one cognitive domain</td>
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<tr>
<td>- No impairment in activities of daily living</td>
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<tr>
<td>• Dementia:</td>
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<tr>
<td>- Characterized by impairment of memory and at least one other cognitive domain</td>
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<td>- Decline in function which interferes with daily function and independence</td>
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References


