Geriatric Assessment in Older Patients with Acute Myelogenous Leukemia: Treatment Updates and Implications

Acute myelogenous leukemia (AML) is a disease of older adults, with a median age of presentation of 67 years; only 5-10% of patients are alive at 5 years. Traditionally older patients have not received intensive induction chemotherapy to avoid toxicities, yet current research shows fits patients treated with intensive chemotherapy have better outcomes than patients with no treatment. The goal of this program is to close existing cancer clinician competency gaps regarding new data on investigational agents for AML along with evolving evidence-based guidelines and current understanding of treatment outcomes among older patients with AML. Hematology care teams will receive updates on current treatment treatments, the new data on investigational agents for AML, and how to make risk-based decisions among older patients with AML.

TARGET AUDIENCE
This activity is intended for hematologists, hematology Nurse Practitioners (NPs) and Physician Assistants (PAs) and oncology nurses engaged in the care of patients with acute myelogenous leukemia (AML).

EDUCATIONAL OBJECTIVES
At the conclusion of these educational initiatives, participants should be able to:
- Select appropriate treatment for AML according to patient risk group
- Assess frailty status among older patients newly diagnosed with AML or those needing a new line of therapy

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PHYSICIAN CONTINUING MEDICAL EDUCATION
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Credit Designation
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Faculty Disclosures
Ashley Leak Bryant PhD, RN-BC, OCN has no real or apparent conflicts of interest to report.

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The following Carevive Systems, Inc. planners and managers reported the following: Timothy J. DiChiara, PhD, Consulting Fees, Daiichi Sankyo, Inc.

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FEE INFORMATION
There is no fee for this educational activity.

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Acute myelogenous leukemia (AML) is primarily a disease of older adults, with a median age at diagnosis of approximately 68 years (SEER, 2018). However, because older adults are under-represented in clinical trials, little specific evidence exists to guide treatment decisions for this population, which is often frail with multiple comorbidities (Hamaker et al, 2014). Because frailty has been associated with poor therapeutic response, increased toxicity, and low survival rates, integrating frailty assessment into clinical care for older patients is critical for optimal therapy (Ahmed et al, 2007; Abel & Klepin, 2018).

Choice of AML treatment depends in part on patient fitness, which can be measured with a combination of a comprehensive geriatric assessment (CGA), comorbidity evaluation, and assessment of organ function (Abel & Klepin, 2018). Also important to consider are psychological health, current quality of life, patient goals and values, medication burden, cognitive function, and social support.

Although no screening instrument alone can substitute for comprehensive geriatric assessment by a geriatric physician and the multidisciplinary care team, several tools can be integrated into hematology practice (Abel & Klepin, 2018). For example, patients should be queried about their ability to perform the activities of daily living (ADLs: bathing, ambulation, toileting, transfers, eating, dressing) and Instrumental Activities of Daily Living (IADLs: shopping, cooking, cleaning, using the telephone, managing money and medications). Performance status can be measured with common scales (e.g., Eastern Cooperative Oncology Group or Karnofsky). Tools for assessing comorbidities include the Cumulative Illness Rating Scale (CIRS), Charlson Comorbidity Index (CCI), and Hematopoietic Cell Transplant Comorbidity Index (HCT-CI; Sorror et al, 2005), which can predict AML induction risk and mortality (Schoen et al, 2017). Other tools include the Geriatric 8 (G8) survey, which consists of questions about food intake, weight loss, mobility, neuropsychological function, body mass index, number of prescription medications, self-reported heath status, and age; the Clinical Frailty Scale (CFS); the Groningen Frailty Indicator (GFI); the Vulnerable Elders Survey (VES-13); the Geriatric Assessment in Hematology (GAH); and others (Abel & Klepin, 2018).

Inpatient CGA has been shown to be feasible and useful in patients with AML. In one study of 54 patients with AML (mean age 70.8 ± 6.4 years), a complete CGA was performed at the bedside, which took a mean of 44.0 ± 14 minutes (Klepin et al, 2011). Most patients in the study were impaired in one (92.6%) or more (63.0%) functional domains, including cognitive deficits (31.5%), depression (38.9%), distress (53.7%), lack of ability to perform ADLs (48.2%), impaired physical performance (53.7%), and comorbidity (46.3%) (Klepin et al, 2011). Significant variability in cognitive, emotional, and physical status was detected even after stratification according to tumor biology, which may be important for stratifying therapeutic risk and thus treatment choice.

Despite the demonstrated value of geriatric assessment, the challenge lies in implementing it in the clinical setting, which is often hampered by lack of knowledge and trained personnel, and by time and resource constraints. However, if coordinated in a multidisciplinary manner, the CGA can be performed quickly and efficiently and is a time investment that may pay off with more accurate prognosis, increased quality of life, and improved survival outcomes.

REFERENCES


