Integrating Comprehensive Geriatric Assessment into Hematology Practice: Identifying Frailty and Optimizing Care for Older Adults

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The global population is rapidly aging, leading to a significant increase in the incidence of hematologic malignancies among older adults. In countries like South Korea, a substantial proportion of newly diagnosed patients with conditions such as multiple myeloma and myelodysplastic syndromes are over 65 years old. This demographic shift presents a critical challenge in hematology: determining which older patients can tolerate intensive therapies, such as hematopoietic cell transplantation or novel targeted agents, and which patients require modified treatment approaches. Chronological age is an insufficient predictor of treatment tolerance and outcomes, as biological reserve varies widely among individuals. Furthermore, traditional performance status measures, such as the ECOG scale, often fail to detect occult vulnerabilities, classifying many frail patients as "fit."

This presentation explores the integration of Comprehensive Geriatric Assessment (CGA) into routine hematology practice as a gold standard for identifying frailty and optimizing care. CGA is a multidimensional diagnostic process that evaluates medical, functional, cognitive, and psychosocial domains to create a coordinated plan for treatment and follow-up. We review evidence demonstrating that CGA-identified frailty is a robust independent predictor of overall survival, treatment-related toxicity, and treatment completion across various hematologic malignancies. Specific deficits, such as impaired physical function, cognitive decline, and malnutrition, have been shown to correlate with adverse outcomes, including increased non-relapse mortality in transplant settings.

Practice could be proposed to be a two-step implementation model suitable for busy clinical settings: initial screening with tools like the G8 questionnaire, followed by a full CGA for those who screen positive. This approach allows for the efficient identification of patients who would benefit from targeted interventions. Finally, we discuss actionable strategies based on CGA findings, such as medication management, nutritional support, and physical therapy, emphasizing that the goal of CGA is not merely to categorize risk but to intervene and optimize the patient's condition to improve both survival and quality of life during treatment.