AML-021: A Retrospective Study of Clinical Characteristics and Outcomes of Elderly Acute Myeloid Leukemia (AML) Patients at Oncology Center Mansoura University (OCMU)

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Background

Management of elderly acute myeloid leukemia (AML) represents a therapeutic challenge. Tools used for comprehensive geriatric assessment (CGA) in elderly AML are not uniform. Outcome of treatment for patients of advanced age is often compromised by comorbidities burden and enhanced susceptibility to toxicities from therapy.

Objective

This study intended to determine the demographic data, clinical characteristics, and the treatment and outcomes in de novo elderly AML patients.

Patients & Methods

This is a retrospective single-center study of 226 elderly (≥ 60 years) AML patients; identified from the Database (2010.20) at Oncology Center Mansoura University (OCMU) and were followed till the end of 2021. The median age was 67.12±5.65 years, M/F:128/98. One-hundred and six (86.7%) showed ECOG PS ≥2 at diagnosis.

Eighty-three patients received standard induction chemotherapy (7+3), 83 received reduced-intensity treatment (LDAC, azacytidine) and 60 patients received BSC only. At the end of the review of the study, 65 were alive. Comorbidities were assessed using Charlson Comorbidity Index (CCI) and Cumulative Illness Rating Scale-Geriatric (CIRS-G) scores. Treatment-associated adverse events were evaluated by WHO toxicity grades.

Results

Hypertension (37%), pulmonary infections (24.7%) and DM (20.8%) were the most common comorbidities. Thirty-five (16.9%) patients achieved CR and 57 (27.5%) achieved PR. Serious (grade 3-4) hematological toxicities were: anemia (62.7%), granulocytopenia (63.85%) and thrombocytopenia (82%). Patients with CR had better median OS and DFS (21 months (95%CI, 7.55-34.45, *P* <0.001) and 12 months (95%CI, 6.74-17.26, *P* <0.001), respectively). PS ≥2 (fig.1), CCI >4 (fig.2) and CIRS-G >6 (fig.3) were shown to be risk factors of dismal OS in older AML patients (*P* <0.001, 0.021 and 0.001, respectively).

Figures

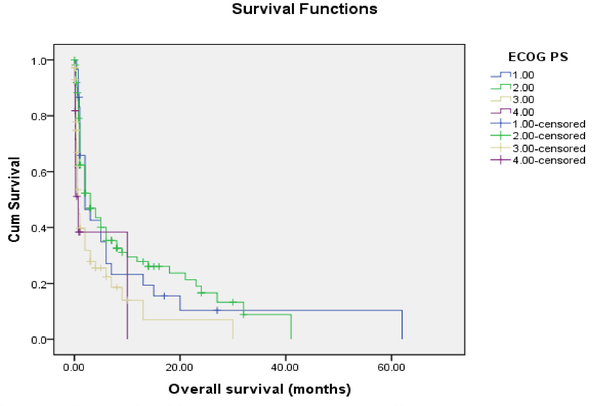


Fig.1 Median OS in elderly AML patients according to ECOG PS score

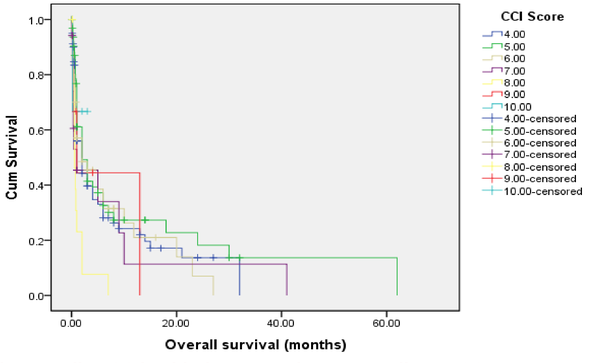


Fig.2 Median OS in elderly AML patients according to CCI score

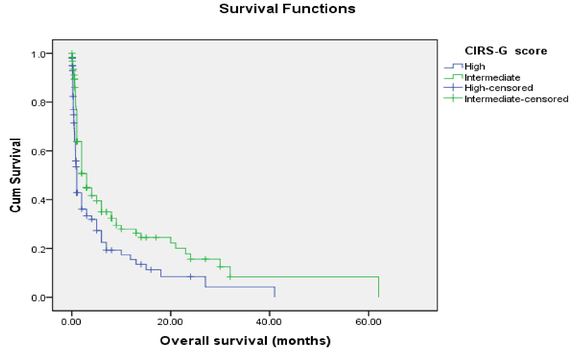


Fig.3 Median OS in elderly AML patients according to CIRS-G score

Discussion

Comorbidity burden and geriatric assessment can be done easily at diagnosis. They cover various physical and psychological aspects and can assist in treatment planning. In the study herein, we concluded that PS ≥2 and high CCI and CIRS-G scores are poor prognostic factors of OS in elderly AML patients.

References

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