marker is associated with some cytogenetic abnormalities. CD56 is a potential factor for poor prognosis in groups of children with AML and should be taken into account when stratifying risk groups.

Keywords: Submit Feedback, Sidebars, History, Saved.

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PP 08_ Case report

LOW DOSE CYTARABINE PLUS SORAFENIB IN AN ELDERLY PATIENT WITH ACUTE MYELOID LEUKEMIA

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Introduction: Acute Myeloid Leukemia (AML) is the most common acute leukemia in adults and is generally associated with a poor prognosis. The failure of therapeutic approaches in AML treatment is attributed to various clinical characteristics of patients, disease biology, and treatment intensity. Mutations in the Fms-Like Tyrosine kinase-3 (FLT3) receptor have been reported in approximately one-third of AML cases. The most common FLT3 mutation is Internal Tandem Duplication (ITD), which has been identified in approximately 25% of adult AML patients and in 3%–5% of newly diagnosed Myelodysplastic Syndromes (MDS). FLT3-ITD is associated with high White Blood Cell (WBC) counts, elevated Lactate Dehydrogenase (LDH) levels, increased percentages of blast cells in the blood and bone marrow, and poor clinical outcomes. However, it does not appear to significantly affect the ability of adult patients to achieve Complete Remission (CR). **Objective:** This case report presents the response of a 71-year-old AML patient to low-dose Cytarabine (Ara-C) combined with sorafenib treatment. **Case presentation:** A 71-year-old female patient presented in February 2024 with complaints of excessive thirst, fatigue, weakness, and loss of appetite. At diagnosis, leukocytosis, anemia, and thrombocytopenia were observed. Peripheral blood smear analysis revealed blast cell infiltration, and immunophenotypic studies identified markers consistent with the AML M5 subtype: CD34+/− (3.4%), CD123+, CD33+, CD13+, CD14+, CD36+, CD64+, HLA-DR+, and cMPO+. Conventional karyotyping was normal, whereas molecular analysis detected FLT3-ITD (51%, 27 bp mutant). Given the patient's overall health status, a treatment regimen of low-dose Ara-C (20 mg BID on days 1–10) and sorafenib (400 mg on days 11–28) was initiated. Due to hematologic toxicity, dose reductions were necessary during treatment. After four cycles, bone marrow aspiration revealed a blast percentage of 0.8%, FLT3-ITD mutation was no longer detectable, and Minimal Residual Disease (MRD) negativity was achieved, confirming Complete Remission (CR). This treatment protocol was selected based on the patient's clinical condition, leading to a successful outcome. **Results:** FLT3-ITD-positive AML patients may benefit from low-dose Ara-C and sorafenib therapy, particularly when carefully selected based on clinical criteria. However, further comprehensive randomized prospective studies are required to better evaluate the efficacy and safety of this approach. **Discussion:** This case highlights the efficacy of low-dose cytarabine and sorafenib combination therapy in an elderly AML patient with FLT3-ITD mutation. FLT3-ITD mutation is a well-established marker of poor prognosis in AML and is associated with resistance to conventional therapies. In elderly AML patients, treatment decisions are often challenging due to comorbidities and reduced tolerance to intensive chemotherapy. The standard approach for geriatric AML patients includes hypomethylating agents combined with BCL-2 inhibitors, with the addition of FLT3 inhibitors when indicated. However, given the patient's high frailty index, a decision was made to initiate low dose cytarabine and sorafenib therapy, resulting in complete remission and MRD negativity. It is important to note that hematologic toxicity may require dose adjustments during treatment, as observed in this case. Macdonald et al. conducted a Phase I/II study in 21 patients with MDS and AML, reporting a complete response rate of only 10% with low dose cytarabine and sorafenib therapy. Although this outcome may seem discouraging, our case demonstrates that this combination remains a viable option for selected elderly AML patients with FLT3-ITD who are ineligible for intensive chemotherapy. Nevertheless, larger scale randomized controlled trials are necessary to further assess the efficacy and safety of this treatment approach. In the future, investigating the combination of this regimen with other targeted agents, such as venetoclax, may expand treatment options. Additionally, long-term follow-up data and quality-of-life assessments will be essential to understanding the real-world effectiveness of this therapeutic strategy.

Keywords: AML M5, FLT3-ITD mutation, Low-dose Ara-C, Sorafenib.

Patient Monitoring Summary.

Timepoint	WBC ($\times 10^9$/L)	HGB (g/dL)	PLT ($\times 10^9$/L)	Bone Marrow Blast Percentage	Peripheral Blood Blast Percentage	FLT3-ITD Mutation
At Diagnosis	102	9.8	50	Not performed	67%	51% (27 bp mutant)
Post-4th Cycle	3.14	10	228	0.8%	Absent	Negative

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PP 09_ Case report

OUTCOMES OF ALLOGENEIC STEM CELL TRANSPLANTATION IN PATIENTS WITH ACUTE MYELOID LEUKEMIA: A SINGLE-CENTER EXPERIENCE

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