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.

https://doi.org/10.1016/j.htct.2025.103885

PP 08_ Case report

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

Tural Mahmudov

Main Clinical Hospital of Ministry of Defence of Azerbaijan Republic

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

https://doi.org/10.1016/j.htct.2025.103886

PP 09_ Case report

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

Yakup Unsal [a], Muhammed Murati [a], Guler Delibalta [b], Serdar Bedii Omay [a]

[a] *Private Emsey Hospital Hematology and Stem Cell Transplantation Center, Istanbul*
[b] *Private Emsey Hospital Infectious Diseases, Istanbul*

Objective: The aim of this study is to evaluate the allogeneic hematopoietic stem cell transplantation data performed in our transplant center for patients diagnosed with Acute Myeloid Leukemia (AML). **Materials and methods:** Between 2016 and 2024, a retrospective evaluation was conducted on 176 patients who underwent allogeneic hematopoietic stem cell transplantation at the Adult Stem Cell Transplant Unit of Private Emsey Hospital due to AML diagnosis. **Results:** The retrospective analysis of AML patients who underwent allogeneic transplantation revealed an average age of 43.2 years. A total of 130 patients received a related donor transplant, while 46 underwent unrelated donor transplantation. The Turkish National Bone Marrow Donor Bank (TÜRKÖK) was the only source for unrelated donors. HLA allele mismatch (1 allele) was present in 29 donors, and 80 transplants were performed between different genders. The average time for neutrophil engraftment was 17.7 days, and for platelet engraftment, it was 19.5 days. The 100-day mortality rate was determined to be 20%. **Conclusion:** AML is a hematologic malignancy that can be treated with allogeneic stem cell transplantation. Unrelated donor transplantation is a critical option for patients without a suitable family donor who require allogeneic transplantation. Our center's AML transplant patient demographic data aligns with the findings in the literature. **Case report:** Acute Myeloid Leukemia (AML) is the most common clonal hematopoietic stem cell disorder in adults. Prognosis is assessed based on age, gender, performance status, and cytogenetic mutations. Hematopoietic Stem Cell Transplantation (HSCT) is a widely used treatment method, particularly for hematological malignancies. Allogeneic HSCT offers curative potential for many hematologic malignancies. Transplantation is performed in AML patients to reduce the risk of relapse. A fully HLA-matched related donor is the preferred choice for allogeneic HSCT. However, only about 25% of patients have a fully HLA-matched related donor. In such cases, an allogeneic transplant from an unrelated HLA-matched donor may be performed. This study presents data on allogeneic HSCT procedures performed in our transplant center for AML patients. **Methodology:** A retrospective analysis was conducted on allogeneic hematopoietic stem cell transplantations performed between 2016 and 2024 in the Adult Stem Cell Transplant Unit of Private Emsey Hospital for AML patients. **Results:** A total of 176 AML patients who underwent allogeneic transplantation were retrospectively analyzed. The median patient age was 43.2 years (range: 16–72), with 53% (n = 94) being male and 47% (n = 82) female. Two patients (1%) had previously undergone autologous stem cell transplantation, and seven patients (4%) had a history of prior allogeneic transplantation. Among the patients, 130 (74%) underwent HLA-Matched Sibling Donor (MSD) transplantation, while 46 (26%) received an unrelated donor transplant. All unrelated donors were obtained from the Turkish National Bone Marrow Donor Bank (TÜRKÖK). Among the 176 stem cell donors, 29 (16%) had a one-allele HLA mismatch (9/10), while 147 (86%) were fully HLA-matched (6/6 and 10/10). A total of 80 transplants (37%) were performed between different genders. The median age of donors was 39.5 years (range: 14–82). As a conditioning regimen, 107 patients (61%) received myeloablative conditioning, 57 patients (32%) received a non-myeloablative regimen, and 12 patients (7%) received a Reduced-Intensity Conditioning (RIC) regimen. Peripheral blood stem cells were used for all patients, with an average of 6.59×10^6/kg (range: 2.86 -15.5×10^6/kg) stem cells infused. Eighteen patients (10%) experienced graft failure, while the remaining 158 patients achieved engraftment, with neutrophil engraftment occurring at a median of 17.7 days (range: 10–32) and platelet engraftment at a median of 19.5 days (range: 10–34). Among the 158 patients who achieved engraftment, chimerism analysis could not be performed in 18 cases. In the remaining 140 patients, chimerism levels ranged from 10% to 100%, with an average of 94%. Full donor chimerism (100%) was observed in 46 patients (33%). Within the first 100 days, 35 patients (20%) died. Among patients who achieved engraftment, 17 (11%) died. The median time to death was 48.2 days (range: 8–94). **Conclusion:** Despite intensive chemotherapy, 10%–40% of AML patients fail to achieve remission. Even among young adult patients who reach remission, relapse occurs in approximately 50% of cases. In this high-risk group, allogeneic HSCT represents a curative treatment option. Unrelated donor transplantation is particularly valuable for patients requiring allogeneic HSCT who lack a suitable related donor. Our center's AML allogeneic HSCT patient and donor characteristics, conditioning regimens, engraftment times, and 100-day mortality rates are consistent with findings in the literature.

https://doi.org/10.1016/j.htct.2025.103887

PP 10_ Case report

EXPERIENCE WITH TOTALLY IMPLANTABLE VENOUS ACCESS PORTS IN PATIENTS WITH HEMATOLOGICAL MALIGNANCIES

Erkan Bilgin, Ahmet Bayrak

Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital

Objective: Totally Implantable Venous Access Ports (TIVAP) are widely preferred for oncology patients requiring chemotherapy.[1] The most common cause of port removal in hematological malignancy patients is infection, followed by dysfunction.[2,3] The aim of this study is to evaluate single center experience of TIVAP in patients with hematologic oncology. **Methodology:** 126 patients who were followed up in the hematology-oncology department of the tertiary oncology hospital and who had port catheters inserted in the interventional radiology unit between January 2019 – January 2022 was evaluated retrospectively. Post-procedure control radiographs of the patients were evaluated for early complications and localization suitability. Additionally, patients' port catheter follow-ups were evaluated for infection and dysfunction. **Results:** 68 (54%) of the patients were male and 58 (46%) were female. The age range of the patients was 18–65, and the average age was calculated as 41.3. 60 (48%) patients were