

The 10th International Medical Congress For Students And Young Doctors



## 5. TREATMENT OF ACUTE NON-LYMPHOBLASTIC LEUKEMIAS

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**Introduction.** Acute myeloid leukemias (AML) are a group of hematological malignancies with primary involvement of the bone marrow (BM). These disorders of hematopoietic system develop due to genetic changes in blood cell precursors that lead to the overproduction of neoplastic clonal myeloid blast cells. It is the most common group of leukemias among the adult population and account for 80% of all cases. Ongoing research and clinical trials continue to explore new therapies and management approaches for AML, including targeted therapies, immunotherapies and personalized medicine strategies based on a patient's genetic mutations.

Aim of study. Identification of clinical and laboratory features, evaluation of the effectiveness of different treatment methods of AML.

**Methods and materials.** We present the results of retrospective and prospective analysis of medical records of patients with AML, diagnosed and treated at the Institute of Oncology between 2016-2023. The type of leukemia was identified according to the WHO classification of hematological malignancies and FAB classification of acute leukemias. Our study enrolled 50 adult patients.

**Results.** All of the studied patients presented with anemic syndrome, 87.3% - with hemorrhagic syndrome, 52.1% - with proliferative syndrome and 66.19% - with infectious complications. According to the complete blood count parameters, 97% of the patients had low hemoglobin and erythrocyte levels, 66.17% - leukocytosis, in 19.71% - leukopenia and all patients had changes in the leukocyte formula. Blast cells in the peripheral blood were found in 67% of cases. The BM aspiration revealed more than 20% blasts at diagnosis in 95.7% of cases. According to the FAB classification, M3 and M4 predominated - 22.55% and 35.2% respectively. Induction and consolidation treatments were carried out according to 2+5, 3+7 regimes, low doses of Cytarabine and ATRA. Maintenance treatment was performed with 2+5, 5+Mercaptopurin, 5+Cyclophosphamide and Cytarabin+Mercaptopurin. The chemotherapy treatment was associated with complications: pancytopenia - 73%, infectious complications - 23%, ATRA syndrome - 4%. The mortality rate among studied patients was 57.7%. The most frequent causes of death in our study were multiple organs dysfunction syndrome and hemorrhagic stroke.

**Conclusion.** AML are oncological diseases with progressive evolution and unfavourable prognosis. Early diagnosis and adequate treatment initiation will contribute to the increase of survival. In spite of advances of treatment and increased life expectancy, AML may still be considered a challenging disease for management, especially in old patients.

Keywords. AML, treatment, complications.