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Conference Abstract A17

Coexistence of Multiple Myeloma and T-Cell Lymphoblastic Leukemia/Lymphoma (Etp-All): A Rare Clinical Case

N.K. Temir[1], V.M. Kemaykin[1], R.F. Vildanova[1], A.M. Kuttymuratov[1], T.R. Sergazina[1], Sh.A. Zholdasova[1], N.B. Dairova[1], Zh.A. Iskakova[1]

[1]*LLP 'National Scientific Oncological Center', Astana, Republic of Kazakhstan*

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Corresponding author's email: temir.n@gmail.com

Introduction

The coexistence of two hematologic malignancies in a single patient is extremely rare. Of particular interest is the development of acute lymphoblastic leukemia of the T-cell early precursor variant (ETP-ALL) in a patient who had been in strict complete remission of multiple myeloma after autologous bone marrow transplantation. Such cases require a comprehensive diagnostic approach and individualized therapy planning.

Clinical Case

A 45-year-old man was examined in 2018 for anemia and bone pain. Laboratory and morphological studies established a diagnosis of multiple myeloma IgG+KAPPA (25.1% as of 05.01.18), stage IA according to Durie–Salmon PLUS, complicated by extramedullary plasmacytoma and myeloma nephropathy. Several lines of chemotherapy (VCD, PAD, DT-PACE, CRD) were administered, and in August 2019 an autologous bone marrow transplantation with MEL200 conditioning was performed. Since September 2019, maintenance therapy with lenalidomide was initiated. By July 2020, strict complete remission was achieved according to IMWG criteria.

In December 2024, inguinal lymphadenopathy was detected. Initial histological findings suggested poorly differentiated carcinoma, but repeat analysis at a specialized oncohematology center revealed T-cell lymphoblastic lymphoma/early T-cell precursor acute lymphoblastic leukemia. Morphological and immunophenotypic examination of the bone marrow confirmed the presence of T-lineage blast cells (about 10%).

From March 2025, an induction chemotherapy course according to the '7+3 DNR' regimen was administered, achieving complete remission and minimal residual disease (MRD)-negative status. In May 2025, consolidation with intermediate-dose cytarabine (IdAc 123) was performed.

In July 2025, immunophenotyping revealed MRD positivity. Options of CAR-T therapy and allogeneic bone marrow transplantation were considered. After consultations, a haploidentical transplantation from the daughter (5/10) was recommended, but the decision was made to continue chemotherapy locally while searching for an unrelated donor.

Discussion

The coexistence of two hematologic malignancies in one patient is extremely rare. In this case, multiple myeloma was in long-term remission after autologous bone marrow transplantation. The appearance of inguinal lymphadenopathy was the reason for further evaluation. Initial histology failed to provide a definitive diagnosis, but repeat analysis with immunohistochemical and immunophenotypic methods identified T-cell lymphoblastic lymphoma/early T-cell precursor acute lymphoblastic leukemia.

Such cases require heightened vigilance when new clinical or laboratory changes occur in patients in remission. Timely extended diagnostics allow refining the diagnosis and selecting the optimal therapeutic strategy. Despite remission, the presence of minimal residual disease indicates a high risk of relapse and necessitates consideration of allogeneic bone marrow transplantation.

Conclusion

This case illustrates the rare coexistence of multiple myeloma and T-cell lymphoblastic leukemia/lymphoma, underscoring the importance of timely diagnostics, diagnosis verification, and a comprehensive treatment approach.