CHRONIC LYMPHOCYTIC LEUKEMIA IN A BETA THALASSEMIA MAJOR ADULT FEMALE “ RARE COMBINATION” : A CASE REPORT

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INTRODUCTION

Thalassemia and chronic lymphocytic leukemia (CLL) are recognized as two separate diseases, and the coexistence of thalassemia and CLL is not reported before. Thalassemia represents a diverse group of inherited hematological disorders characterized by defective globin chain synthesis [1]. CLL is characterized by the clonal proliferation and accumulation of mature, typically CD5-positive B-cells within the blood, bone marrow, lymph nodes, and spleen. According to incidence of malignancies in B - thalassemia major patients it is not uncommon mainly due to iron overload affecting organs . Cases of malignancy like hepatocellular carcinoma recorded [2], but no known cases of Chronic lymphocytic leukemia development in B thalassemia major patients.

AIM

To report the first documented case of β-thalassemia major developing chronic lymphocytic leukemia and to highlight the diagnostic and therapeutic challenges in this unique coexistence.

METHOD

- Clinical, radiological and laboratory data obtained from the patient's medical records
- Physical examination performed in the Hematology outpatient clinic

RESULTS

Patient started RB protocol (Rituximab + Bendamustine) . After three cycles, a CT scan showed a regressive disease course with reduction in lymph node size, including cervical lymph nodes with the largest measuring 7 mm , axillary lymph nodes with the largest measuring 9 mm on the left side, and abdominal lymph nodes becoming subcentimetric. After completion of a total of six cycles, a CT scan showed a stationary disease course, and the patient clinically had no indication for treatment. The patient is currently on regular follow-up every 3months . Regarding her underlying β-thalassemia she is on transfusion support every 2 months and Deferasirox.

CONCLUSIONS

This case illustrates the complex interplay between β-thalassemia major and chronic lymphocytic leukemia in a young adult female, emphasizing the importance of a multidisciplinary approach to diagnosis and management. Further research is needed to elucidate the underlying mechanisms linking these two conditions and optimize therapeutic strategies to improve outcomes in affected individuals.

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