FREQUENCY OF AUTOIMMUNE HEMOLYTIC ANEMIA IN CHRONIC LYMPHOCYTIC LEUKEMIA

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Introduction

Chronic lymphocytic leukemia, (CLL), is frequently associated with immune disturbances. Some auto-reactive cells may escape natural apoptosis and represent a continuous treatment.

Aim

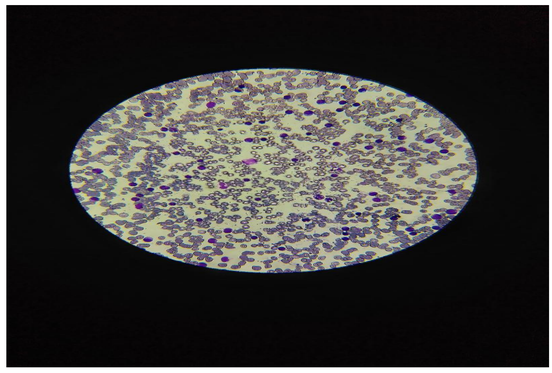
Aim of this study was to emphasis the mechanisms which lead to autoimmune cytopenia in CLL and involvement of interactions between the malignant B-CLL cells and abnormally functioning T cells.

Objectives

Autoimmune hemolytic anemia, (AIHA), was considered by the presence of all the following criteria: Hemoglobin, (Hb), levels lower than or equal to 11 g/dL, in the absence of any cytotoxic treatment. The evidence of an underlying autoimmune mechanism, such as a positive direct antiglobulin test, (DAT), for either immune-globuline IgG or complement C3 or the presence of cold agglutinin and presence of one or more laboratory marker of hemolysis as the high reticulocyte count, low serum haptoglobin levels, increased serum lactate dehydrogenase, (LDH), and indirect bilirubin levels.

Results

The autoimmune hemolytic anemia (AIHA) appeared in 5% to 10% of the patients and autoimmune immune thrombocytopenia (ITP) in 2% to 5% of patients. Also, autoimmune cytopenia, (AIC), appeared in patients with high-risk CLL (ex, unmutated immunoglobulin heavy chain variable region gene, [IGHV], 17p and 11q deletion.



Summary

Image of the microscopic smear in Chronic Lymphocytic Leukemia: numerous lymphocytes.

Discussion

Some auto-reactive cells may escape natural apoptosis and represent continuous treatment with a potential autoimmune response. However apoptotic cells do not disappear after phagocytosis. Ingredients of apoptotic cells indeed survive the intra-cellular processing and are recycled to the membrane of phagocytes.

References

1. Giata E, Ehrenfelda M, Shoenfe Y. Cancer autoimmune diseases. Autoimmunity Reviews.