

Telomerase activity and Fas expression in acute leukemic

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Telomerase is a ribonucleoprotein enzyme that maintains protective structure at the ends of eukaryotic chromosomes. Telomeric repeat amplification protocol (TRAP) was used to determine telomerase activity (TA) in WBCs of 45 pediatric patient with acute lymphoblastic leukemia (ALL) before treatment and after complete remission and in WBC of 6 healthy donors that were selected as a control group. CD95 (Fas/APO-1) is a cell surface receptor able to trigger apoptosis in a variety of cell types. The expression of CD95 antigen on leukemia blasts from the 45 patients before treatment; on leukocytes after complete remission and on leukocytes of the control group were determined by flow cytometry. The results obtained in the present study indicate that, telomerase activity and Fas expression increased significantly in the studied cases before treatment compared to the control group. After treatment, there was significantly decrease in TA while there was significant increase in Fas expression compared to before treatment. These results suggest that telomerase activity and Fas expression might be useful in diagnosis and follow-up of ALL in pediatric patients.

Biography

Liliane L.Henna is presently working on her master degree at the age of 27 years, she is a teaching assistant in the biochemistry Department at the Faculty of Pharmacy, October 6 University, She is also an outstanding Pharmacist. At present, she is studying lymphoblastic leukemia before and after treatment in pediatric patient.