EXPRESSION OF P-GLYCOPROTEIN AND BC1-2 IN LYMPHOPROLIFERATIVE DISORDERS.

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A major problem in the treatment of leukemia and lymphoma is caused by the development of drug resistance to chemotherapeutic agents at diagnosis or after chemotherapy. It was suggested that the mechanisms of drug resistance consists of drug resistance proteins such as P.glycoprotein, which work as a drug efflux pump and antiapoptotic mechanism.Quantitative immunocytochemical detection of P.gp and Bcl-2 may be important and informative in the lymphopoliferative cases (ALL, NHL, CLL).Eighty five patients with lymphoproliferative disorders in addition to twenty normal control were the subjects of this work.The patients were devided into three groups:-a-Patients with acute lymphoblastic leukemia (30 cases).b-Patients with dissiminated Non-hodgkin lymphoma (30 cases).c-Patients with chronic lymphocytic leukemia (25 cases).The present work revealed statistically significant increased expression level of P.gp and Bcl-2 in the studied patients compared to control.There was weak concordance between P.gp and BcL-2 in CLL, moderate concordance in ALL and high concordance in NHL.No statistically significant difference between P.gp and Bcl-2 expression and the clinical risk factors as age, organomegally WBC, Hb platelets, Blast cells immunophenotype and stage of disease in CLL, except in CLL where there was increased expression of P.gp in B than T-CLL (border line significance).We compared P.gp and Bcl-2 negative and positive patients with DFS and OS of the studied patients in 2 years follow up.