Plasma levels of CXCL 9, 10, 11 and 12 and their impact on overall survival in chronic lymphocytic leukemia

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Background/Aims: The expression of chemokines is altered in chronic lymphocytic leukemia (CLL) due to inactivation of the tumour suppressor genes or constitutive activation of the oncogenes. The aim of this study was to measure plasma levels of chemokines CXCL 9, 10, 11 and 12 in CLL and relate that, if any, with abnormal immunophenotype considered with bad prognosis.

Methods: Plasma from 40 CLL patients and 20 healthy age and gender-matched controls were analysed for CXCL 9, 10, 11 and 12 by enzyme-linked immunosorbent assay.

Results: CXCL11 and 12 plasma concentrations were significantly higher in CLL patients compared to controls (P=0.013 and 0.0015) respectively. CLL patients with higher CXCL11 or 12 levels (median >128.4, 1006.65 pg/mL respectively) before treatment had worse prognosis for overall survival (OS) (P = 0.0342, 0.0229).

Conclusion: High plasma levels of CXCL11 and 12, is associated with high grade CLL leukemia and may be useful as a predictive indicator for OS.

Biography
Omnia Abd-Elfattah is an Assistant Professor of Clinical Oncology, Faculty of Medicine Tanta University Hospital, Egypt, member of the Egyptian Association for Cancer-based National Cancer Institute, Cairo, Egypt and Patients' Friends Society Tumors in Gharbia based Department for Clinical Oncology, Tanta University Hospital, Egypt. She has Master's and MD degrees in Clinical Oncology in 2002 and 2009 respectively from Faculty of Medicine Tanta University Hospital, Egypt. Her Master's and MD theses focused on non-Hodgkin's lymphomas. She is teaching postgraduate students and is interested in participating in a therapeutic service in university hospitals. She attended many courses in the capabilities of faculty development and supervised multiple Master's and MD theses. She has attended multiple national and local conferences of Clinical Oncology and has multiple international published papers in Clinical Oncology.

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