Diseases (such as Cardiac, respiratory, renal, hepatic, hematological, thyroid or other skin Diseases, etc.) and smokers were excluded from the study. Each patient and control individual was subjected to full medical history, complete medical examination and routine lab test. Determination of allergens-specific IgE (for 20 separate food and 20 Aeroallergens) in serum for the patients was done by using EUROLINE Atypi Screen.

Results: Each of the patients and control groups were comparable according to age and gender. There was a significant difference between the CU patients and the control group as regard the prevalence of any allergen sensitization (65.7% for CU patients and 18% in control group) p < 0.05. There was also a significant difference between the sensitized individual in each group as regard the number of allergens per each individual; for sensitized CU patients the mean was 3 allergens and interquartile range was (2-4), for the sensitized control individuals the mean was 2 and interquartile range was (1-2) with p = 0.014. The mostly frequent allergens were found in the CU sensitized patients was the house dust mite allergens (34.8% of the sensitized CU patients were sensitized to one or more of the two types of mites; dermatophagoides pteronyssinus and or dermatophagoides farinae).

Conclusion: A great prevalence of CU patients proved to be sensitized to common allergens which open the door to start a trials to use specific allergen immunotherapy in this group of patients.

Flow cytometric assessment of CD30 expression in adult patients with acute leukemia

R.M. Said1, H.M. Abdelbary1, A.M. Elaffifi1, R.A. El-Gamal2 and K.A. Almuawi3

From the 1Department of Clinical Hematology and Bone Marrow Transplantation, Ain Shams University, Cairo, Egypt, 2Department of Clinical Pathology, Ain Shams University, Cairo, Egypt and 3Sabratha Oncology Center, Libya

rs_magdy07@yahoo.com

Background: CD30, a member of (TNFR) superfamily, was originally identified as a cell-surface marker of Reed-Sternberg cell in classical Hodgkin Lymphoma, CD30 is also expressed by Several types of T- and B-cell non-Hodgkin’s Lymphoma, such as anaplastic large cell lymphoma (ALCL), primary mediastinal large B-cell lymphoma (PMBCL) and Epstein-Barr-Virus (EBV)-driven clonal lymphoproliferative disorder as well as in reactive conditions such as infectious mononucleosis.

Patients and Methods: A cross-sectional study that was conducted at Clinical Hematology Department in Ain Shams University Hospital during a period from November 2016 to August 2017. 20 new cases of AML and ALL, 30 refractory or relapsed cases of AML and ALL either T or B were enrolled in this study, CD30 % expression was assessed by flow cytometry on bone marrow sample or peripheral blood.

Results: CD30 with cutoff >20% (+ve) was 46% of cases while cases with cutoff <20% (-ve) was 54% in all leukemia cases, CD30 expression was higher in ALL especially in T-ALL with a mean value of (44.564 ± 27.158) with significant increase in relapsed T-ALL (P value 0.031) followed by B-ALL (23.988 ± 15.678). CD30 expression in relapsed AML and ALL was increased but not yet statistically significant. Significant correlation was found in risk parameters as in WBCs (>100,000), PLT (>30,000) and CD30 expression in T ALL patients with P value (0.038and 0.021) respectively, and non significant between LDH and MRD in T-ALL and all risk parameters in B-ALL. ROC curve revealed that the accuracy of sensitivity and specificity was 69.9%.

Conclusion: CD30 has been shown to be a significant diagnostic tool in cases of acute leukemia especially in newly and relapsed T-ALL, also it can be labeled to be targeted therapy, Drug trial using monoclonal AB to CD30 as treatment in relapsed/refractory cases with special concern to response and survival rate.

Expanded peripheral CD4+CD28null T cells and its association with atherosclerotic changes in patients with end stage renal disease on hemodialysis

A. Mahmoud Okba1, M. Abd El Raouf Raafat2, M. Nazmy Farres1, N. Abd El Nour Melek1, M. Maged Amin1 and N. Nader Gendy2

From the 1Faculty of Medicine, Ain Shams University and 2Theodor Bilharz Research Institute
mariamaged@yahoo.com

Background: End-stage renal disease [ESRD] patients, including those on hemodialysis, possess a high risk for cardiovascular diseases, as the first leading cause of death among them. Traditional risk factors do not utterly elucidate this. Throughout the last two decades, CD4+CD28null T cells; an unusual cytotoxic subset of T lymphocytes, was detected high in a variety of chronic inflammatory diseases associated with excess cardiovascular (CV) mortality.

Objective: To investigate circulating CD4+CD28null T cells frequency in ESRD patients on hemodialysis and to evaluate their relationship with atherosclerotic changes.

Methods: High-resolution carotid ultrasonography was done to assess the common carotid artery intima media thickness in a number of ESRD patients, accordingly patients were selected and subdivided into two groups; 30 with atherosclerosis (mean [SD] age, 51.6 [6.3] years) and 30 without (mean [SD] age, 48.9 [5.5] years). Another 30 healthy individuals (mean [SD] age, 48.5 [6.8] years) were enrolled. Analysis of CD4+CD28null T-cell frequency by flow-cytometry was performed in all studied subjects.

Results: CD4+CD28null T cell percentage was significantly higher in ESRD patients, (mean [SD], 7.3 [2.7] %) compared to healthy individuals (mean [SD], 3.0 [0.8] %), (p < 0.001). Additionally, the expansion of these unusual T lymphocytes was significantly higher in ESRD patients with atherosclerotic changes (mean [SD], 9.47 [0.75] %) compared to those without atherosclerosis (mean [SD], 5.22 [2.14] %), (p < 0.001).

Conclusion: Expanded circulating CD4+CD28null T lymphocyte population in ESRD patients, in correlation to atherosclerotic changes.