1- Impact of Anti-Oxidant Status and Apoptosis on the Induction Phase of Chemotherapy in Childhood Acute Lymphoblastic Leukemia

This study aimed to evaluate oxidative stress and apoptosis in childhood acute lymphoblastic leukemia (ALL) at diagnosis and their impact on outcome at the end of the induction phase. Our study included 50 newly diagnosed children with ALL. Evaluation of oxidative stresses (malondialdehyde and total anti-oxidant capacity) was made at diagnosis and at the end of the induction phase. Apoptosis level was determined by fluorometric terminal deoxynucleotidyl transferase dUTP nick end labeling system for patients at diagnosis and after 1 week of treatment. Our study showed that there was increased oxidative stress at diagnosis and after treatment with chemotherapy. Apoptosis index was higher after 1 week of treatment with chemotherapy when compared to its level at diagnosis.

2- Does Decline of Lung Function in Wheezy Infants Justify the Early Start of Controller Medications?

Objective To compare lung function in wheezy infants, with risk factors of asthma and with some immunological parameters which may be useful as predictors of subsequent asthma.

Methods The data of 241 infants aged 5–36 mo, with recurrent wheeze (≥3 episodes of physician confirmed wheeze) prior to receiving inhaled corticosteroids or anti-leukotrine agents was retrospectively analyzed. They were subdivided into 2 subgroups; those with asthma risk factors (132 patients) and those without (109 patients) Also, 67 healthy, age and sex matched children without recurrent wheezes were taken as control group. Total serum IgE, eosinophilic percentage, tPTEF/tE (time to peak expiratory flow to total expiratory time), total respiratory system compliance (Crs) and resistance of the respiratory system (Rrs) was done for patients and control groups.

Results Wheezy infants had a significantly higher eosinophilic percentage and total serum IgE as well as a significantly lower pulmonary function parameters when compared to healthy controls. Wheezy infants with positive family history of asthma and those who had not been breast fed showed significant reduction in the mean values of tPTEF/tE and increased both eosinophilic percentage and total serum IgE. Crs was significantly decreased in wheezy infants with positive seasonal variations and those who had increased both eosinophilic percentage and total serum IgE. Rrs showed significant increase in wheezy infants with positive family history of atopy and those who had increased eosinophilic percentage and increased total serum IgE.

Conclusions Lung function, eosinophilic percentage, total...
serum IgE and asthma risk factors could be used as predictors for ongoing wheeze in this subset of children.