EVALUATION OF ASTHMA BIOMARKERS AND PULMONARY FUNCTION TESTS IN CHILDREN WITH ASTHMA

Among subtypes, school days missed are depicted in Table 1. Nearly 12% of children dropped out, 6/25 SoJIA, 1/9 Oligoarticular and 1/14 Enthesitis related arthritis (ERA). Using multivariate linear regression, school absenteeism was found to be significantly affected by physical disability measured by Childhood health assessment questionnaire (CHAQ) (p < 0.01). There was no difference between males and females.

Conclusions Most children missed significant number of school days, highest in SoJIA and least in Polyarticular rheumatoid factor (RF) -ve JIA. Dropout rate was high and related to the JIA subtype. Physical disability significantly affected absenteeism.

Results Under supervision there were 35 children with atopic dermatitis. In the age aspect younger age group 3 years presented 10 children, and 5 patients were pre-schoolers and children up to 10 years, in puberty to 13 years it was recorded 9 patients and adolescents 14 to 17 years in the observation group got 10. At the time of admission status of children was assessed as medium to severe in 27 cases and as serious in 8 patients. As a result of children immunoglobulin content with acute exacerbation of AD study it was found that most of the children was observed dysimmunoglobulinemia. The examination stated that the average ceruloplasmin, oxyproline several times higher than normal. Higher values were recorded directly they correlate with the activity and severity of atopic dermatitis.

Conclusion It was also revealed typical atopic dermatitis secondary decrease of cellular immunity. Obviously, reducing the activity of cellular immunity is secondary and depends on the period of the disease and its duration, and levels of ceruloplasmin and oxyproline criteria are allergic inflammatory process.

PO-1014 EFFECT OF LASER ACUPUNCTURE ON THE IMMUNOMODULATORY PARAMETERS IN ASTHMATIC CHILDREN AND ITS RELATION TO ASTHMA IMPROVEMENT

Background and aims LASER acupuncture has often been recommended as a treatment of asthma. The technique is noninvasive, and suitable for children.

Acupuncture has been shown to have an immediate effect on relieving the symptoms of asthma. Few studies have demonstrated that acupuncture has beneficial clinical and physiologic effects on asthma, including the immunomodulatory effects of inflammatory cells and cytokines. Our aim is to study the effect of low power multichannel laser acupuncture in the improvement of asthmatic children and its relation to changes in their immunomodulatory system (IgE-Interleukin-4).

Methods 20 cases of asthmatic children (7–15 years) were subjected to 12 laser acupuncture sessions in acupuncture points selected for asthma according to traditional Chinese medicine 3 times per week. Clinical improvement and medications used were recorded, IL-4, IgE were measured (ELISA technique), Eosinophilic count and pulmonary functions were done before and after sessions.

Results There were a significant improvement in some parameters of pulmonary functions before and after laser acupuncture sessions in comparing to using of conventional medical treatment only (FVC p < 0.001, FEV1 p < 0.001). Also there were improvements in interleukin 4 and IgE levels after laser acupuncture sessions (interleukin 4. p < 0.001, IgE p = 0.002) and there were a significant correlation between some pulmonary functions parameters with IL4 and IgE improvement.

Conclusion Uses of laser acupuncture in accompanied with conventional medical treatment is more effective in controlling of asthmatic children than using conventional medical treatment only and also accompanied with improvement of all IL-4, IgE and pulmonary functions.