Introduction Asthma is chronic disease which in recent years prevalence shows increase rate. In this study we analyze triggers that parents or child will tell as a risk factor for asthma exacerbation in children with asthma.

Aim Presenting cases treated in pulmonology clinic during their exacerbation and triggers that can lead to asthma exacerbation.

Method It is a prospective study, we include 92 children who came with symptoms of asthma exacerbation in pulmonology clinic. Asthma was classified according to GINA classification and evaluate from parent/caregiver or child about risk factors that lead to exacerbation. Factors were listed by GINA.

Results Asthma exacerbation symptoms at children that were examined are cough(100%), difficult breathing(96%) and wheezing(24%) and chest tightness. From all children in our study 34% had one trigger, 16% 2 triggers and the others had more than 3 triggers that lead to asthma exacerbation. Triggers of asthma exacerbation are changing weather (cold air)(36%), viral infection(48%), passive smoking (36%), pollen (16.6%) and 25% of parents don’t know risk factors that lead to asthma exacerbation. Most of the children in the study lives in town (75%).

Conclusion Our study shows that viral infection and cold air are very common triggers of asthma exacerbation especially in small children while in children older than 5 years passive smoking is very present (36%) as risk factor.

Introduction An important characteristic of the herpes simplex virus, is their ability to persist in the tissues of their hosts for many years after initial infection as intracellular viruses. Characteristic life of virus (chronic persistent and cyclic replication) in organisms is often followed by immune dysregulation.

Materials and methods: Clinically manifestations in patients with herpesvirus infections were examined. We analysed: white blood cell count, hemoglobin level, serum immunoglobulins level, enzymes of cell destruction, oxidative metabolism of the peripheral blood phagocytes as ability of NBT reduction, serum level of IFN-γ, IL-4 and DHEAS, cortisol were measured by ELISA test.

Results Our patients had and all of them had positive ELISA test on virus-HSV. Our parameters approved low level of hemoglobin, monocytosis, lymphocytosis, vireocytosis and leukopenia. Our patients had high level LDH, CPK, low level of NBT reduction, serum level of IFN-γ IL-4 and DHEAS, cortisol were measured by ELISA test.

Conclusion Chronic activation of immune system is background of patogenetic mechanisms during herpes simplex virus infection. Different level of DHEAS and cortisol are part of regulatory mechanisms of immune response across endocrine system. Increase levels of DHEAS in our patients can display chronic inflammation. Absence of increase level of cortisol may suggestion that our patients had a little “acute” fase of infection opposite a lot of chronic disorders. Analyse of immunoregulatory mechanisms is essential to order level and place of damage cells, tissue and organs. It is important for therapy and prognosis of disease.