

ABSTRACT

BACKGROUND: Rhinitis is one of the causes of the later asthma-expansion. This disease is very vexatious and has a negative impact on the quality of life. The prevalence steadily rises not only in childhood. Many risk and protective factors that are very important for the expansion of atopic diseases and rhinitis have been described.

OBJECTIVES: To compare two child populations (rhinitics and the reference sample) with different risk and protective factors influencing the expansion of rhinitis. Thanks to the recognition of the risk factor we can project relevant preventive plans and improve our general knowledge in this type of disease.

METHODS: 3845 anonymous and structured questionnaires were distributed at the Czech basic schools. The parents filled in the questionnaires on behalf of their children. The questionnaires were supposed to find out the pregnancy conditions of a mother and the living conditions of a child during three periods (first two years of life, the 6th and the 7th year, the 12th and and 13th year). 2050 filled questionnaire were delivered and the analysis was focused on the group of 334 rhinitic children and 765 nonallergic children. We call a child as a rhinitic that has some problems, for example seasonal or all-season coryza, at least once during the followed periods.

RESULTS: The pregnancy conditions (the risk pregnancy, fevered diseases, eczema, antibiotics usage, paracetamol usage, vomiting, decrease in physical activities during pregnancy, young maternal age and long gestation age could be called the statistic relevant factors. The birth at the end of the year is risk but not statistically relevant. Among the protective factors we can count: higher consumption of cheese, contact with domestic and farming animals, the birth in March, younger and especially older siblings, higher number of births (some results were relevant and some of them were nearly the significance level). We did not prove the effect of Caesarian section, nutrition, smoking in pregnancy, gynecological and urological inflammations.

CONCLUSION: We proved in this study that many prenatal factors are related with the rhinitis expansion in childhood. The inclination to rhinitis can be determined by a great number of factors, for example the period after birth which is important for the development of the immune system.

