

## **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:** As high-risk factors which are statistically significant we indicated following ones: living in blocks of flats, dampness and mould, smoking at home, frequent going down with otitis media, adenoidectomy, scarlet fever, tonsillectomy, more frequent temperatures and having temperature above normal, prevalence of taking antibiotics, incidence of children's worms, more frequent contact with animals e.g. with rodents, a dog in a flat, flatulence, substitute feeding instead of breast-feeding, eating only vegetable fats. Suffering from children's worms infection twice a year and living in a block of flats are dangerous although statistically not very significant. On the other hand there are protective influences: living in the countryside in a new house, dry environment, non-smoking environment, otitis media once a year, having a temperature once a year, falling ill with a temperature after a three-month period, avoiding antibiotics or taking only one course, a longer breast-feeding period, feeding with both vegetable and animal fats (some results were significant and others were approaching the level of significance). Neither the

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influence of livestock contact nor the influence of aeting meet, nor using cosmetics and hygiene stuff, nor the influence of vaccination and the first contact just after being born or in the first night were proved statistically.

**CONCLUSION:** This study proves that a lot of post-natal factors are connected with the origins of rhinitis in childhood. This proves that the early period after birth is important for the development of immune system, but also prenatal development and a lot of other factors can result in proneness to rhinitis.