

INFLUENCE OF OESTROGEN-RELATED FACTORS ON THE PREVALENCE OF ALLERGIC RHINITIS

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In recent years more and more studies focus on the effect of sex hormones on respiratory and immune functions. The present work analyses the relationship between oestrogen level-dependent traits and the incidence of allergic rhinitis. The following traits were considered: digit ratio, age at menarche, regularity of menstrual cycles, waist to hip ratio. The material was composed of survey and measurement data collected from females university students. Students had been diagnosed with allergic rhinitis. The results of logistic regression show that in women with high digit ratio values indicating exposure to high oestrogen level in the prenatal period the risk of allergic rhinitis was almost twice as high than in women with average value of the ratio. The difference was greater for the right rather than left hand. A significantly higher risk of allergic rhinitis was also observed in women for whom the first menstruation occurred at a younger age. No differences in the risk of allergic rhinitis due to the incidence of obesity, abdominal obesity or irregular menstrual cycles were reported. The results indicate that the incidence of allergies in adulthood is associated with elevated oestrogen levels at the early stages of the ontogenetic