

DOES PARACETAMOL USE INFLUENCE HAY FEVER IN CHILDHOOD?

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OBJECTIVE: It is speculated that Paracetamol may influence an atopic disease by depleting glutathione in the airways thus decreasing the respiratory anti-oxidant defence.

AIM: The study was aimed to examine the impact of frequent Paracetamol use on hay fever and its symptoms in children.

MATERIJAL AND METHODS: The self-reported data of 3026 children 13/14 years old obtained from ISAAC phase 3 questionnaires in Skopje were analysed. The relationship between current Paracetamol use (P12) and following parameters separately: allergic rhinitis symptoms ever, current allergic rhinitis symptoms, current allergic rhinoconjunctivitis, severity of allergic rhinitis symptoms and hay fever ever was determined. Odds ratios in logistic regression were used for statistic analysis of data.

RESULTS: It was established that P12 significantly increased the risk of allergic rhinitis symptoms ever (P12 at least once yearly: OR=1.33 95%CI 1.13-1.57 p=0.001; P12 at least once monthly: OR=2.01 1.48-2.73 p=0.000) and current allergic rhinitis symptoms (P12 at least once yearly: OR=1.45 1.21-1.74 p=0.000; P12 at least once monthly: OR=2.39 1.74-3.29 p=0.000). Only frequent P12 at least once monthly was associated with an increased risk of current allergic rhinoconjunctivitis (OR=3.14 1.94-5.08 p=0.000), severity of allergic rhinitis symptoms (OR=2.76 1.39-5.47 p=0.004) and ever-diagnosed hay fever (OR=2.26 1.38-3.69 p=0.001).

CONCLUSION: It seems that frequent Paracetamol use increases the risk of hay fever and its symptoms in children.