7. Kongres Hrvatskog torakalnog društva

7<sup>th</sup> Congress of Croatian Thoracic Society

## TORAKS

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## OBESITY IS AN OFTEN MODIFIABLE FACTOR IN ALLERGIC AND OF NONALLERGIC ASTHMA PHENOTYPES

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Aim: Obesity is an enormous and significant global public health issue and it is one of the most common comorbidity in asthma. It is known that patients with increased body mass index (BMI) have greater risk for development of asthma, especcialy in nonallergic asthma phenotype. Increased BMI can be related also with severity of asthma. This relation between asthma and BMI has recently become significant because it is noticed that obese patients with asthma, after weight loss, report decrease in subjective feeling of dyspnea, improvement of spirometric parameters and less frequent disease exacerbations. Our aim was to compare BMI of examined group of patients with asthma with BMI of control group in order to define the relation between asthma and BMI. Methods: There was 149 subjects in the examined group of patients with asthma (group A) and 153 in the control group (group C). Every patient was diagnosed with asthma, with all clinical, functional and inflammatory relevant parametres. Every patient and subject of control group had their BMI calculated, as the weight in kilograms

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divided by the square of the height in meters. We compared BMI values of group A and C.

Results: Data show that there were more women (61,17%) than man (38,3%) in the group of patients. There erre more women (59,4%) in control group as well. The minimal BMI in the examined group was 16,9 kg/m2, the maximal 47,1 kg/m2 and the median 26,6 kg/m2. The minimal BMI in the control group was 18,3 kg/m2, the maximal was 36,7 kg/m2 and median 25,1 kg/m2.. Comparison of median BMI values of these two groups clearly showes that examined group of patients had significantly higher BMI (P=0,004). Patients with BMI <25 kg/m2 make up 63,5% of patients with allergic asthma phenotype and only 36,5% of patients with nonallergic asthma phenotype and 56,8% of patients with nonallergic asthma phenotype.

Conlusion: In the group of patients with asthma there was great number of patients with excessive weight, especially those with nonallergic asthma phenotype. These results show that BMI is a significant factor contibuting to the development of disease (associated with genetic and other factors), which can and shgould be modified, but not as an discriminating factor for different astma phenotype.