

Asthma, respiratory allergy and cough

The impact of gender and BMI on the clinical course of COPD and bronchial asthma

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Bronchial asthma is a heterogeneous disease. One of its phenotypes is obesity-related asthma. COPD is the fourth most frequent cause of death in the world. The presence of women in that population is lower and its percentage, depending on study, is 7-46%.

Methods

The aim of the study was to assess the influence of BMI and gender on clinical course of asthma and COPD. The study was performed in 2 groups. Group A consists of 57 adult patients suffering from asthma (31 F-females, 26 M-males) with at least 1 exacerbation required treatment with systemic corticosteroids in last year prior to inclusion in the study. Group B consists of 64 patients (26 F, 38 M) with COPD with moderate to severe airflow limitation. Data including age, gender, BMI, duration of disease, treatment, concomitant diseases, packyears, number of exacerbation in the last year were collected in both groups. ACQ (Asthma Control Questionnaire) in group A and CAT (COPD Assessment Test) score in group B were collected. Pulmonary function tests were performed in both groups.

Results

There was no statistically significant difference in analyzed variables ($p > 0.05$). Gender differences was not observed for analyzed parameters in both groups. Obese patients ($BMI > 30.0$) were selected from group A (F=12, M=8) and group B (F=6, M=11). In group A number of exacerbation per year was significantly lower in males (F 1.9, ± 1.1 vs M 1.1, ± 0.5 , $p = 0.05$).

Conclusion

Poorer control of asthma was associated in obese patients with female gender.