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## The Relationship Between Fat Free Mass and Asthma Control

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**Objectives:** Body composition is an important parameter for patients with chronic obstructive pulmonary disease whereas the association between asthma and obesity is not fully understood. The impact of diseases severity of asthma on fat free mass has not been investigated. We aim to investigate the relationship between fat free mass and asthma control.

**Methods:** Patients with stable asthma referred to our outpatient clinic were evaluated. Demographics were noted. Asthma control test (ACT) was performed. Patients were divided into two groups according to ACT; ACT >19 (under control) and ACT ≤19 (uncontrolled). Body composition assessment (using bioelectrical impedance analysis) was performed.

**Results:** One hundred- seventy two patients (female/male: 140/32, age: 53.7±12.6 years, BMI: 29.1±5.4 kg/m ) with asthma were included the study. Fat free mass was significantly higher in group under control than uncontrolled group (respectively; 49.8±8.2 vs. 46.7±4.9 p=0.002). Mean BMI was similiar in two groups (respectively; 28.6±5.6 vs. 30.2±4.8 p=0.07). There was no difference in the frequency of obesity (BMI>30 kg/m ) between control and non-control patients.

**Conclusion:** Fat free mass may be a more valuable finding in assessing asthma control than BMI and obesity. Further studies should be performed to better understand the relationship between fat free mass and asthma control.

**Keywords:** Asthma control, fat free mass, obesity