

European Respiratory Society Annual Congress 2013

Abstract Number: 1922

Publication Number: 3040

Abstract Group: 5.2. Monitoring Airway Disease

Keyword 1: Asthma - diagnosis **Keyword 2:** Wheezing **Keyword 3:** Chronic disease

Title: Characteristics of patients with persistent airflow obstruction from an asthma clinic

Dr. Elisavet 14486 Konstantellou eliskonst@yahoo.gr MD ¹, Dr. Andriana 14487 Papaioannou papaioannouandriana@gmail.com MD ¹, Dr. Stelios 14488 Loukides ssat@hol.gr MD ¹, Dr. Filippas 14489 Emmanouil philipemmanouil@hotmail.com MD ¹, Dr. Anastasia 14490 Papaporfuriou dranastp@gmail.com MD ¹, Dr. Georgios 14491 Hillas ghillas70@yahoo.gr MD ¹, Prof. Spyros 14498 Papis papiris@otenet.gr MD ¹, Prof. Nikolaos 14500 Koulouris koulunik@med.uoa.gr MD ¹, Dr. Petros 14508 Bakakos petros44@hotmail.com MD ¹ and Dr. Konstantinos 14509 Kostikas ktk@otenet.gr MD ¹. ¹ 1st and 2nd Respiratory Medicine Departments, University of Athens Medical School, Athens, Greece .

Body: Objectives: To identify differences in clinical, functional and inflammatory characteristics between asthmatic patients with and without persistent airflow obstruction. Methods: 170 patients were recruited from two asthma clinics of the University of Athens. Patients' demographics, pulmonary function tests, inflammatory cells in induced sputum, bronchial hyperresponsiveness to methacholine (PD15) and treatment were recorded. Persistent airflow obstruction was defined according to the criteria of Kaminska et al. (J All Clin Immunol 2009;124:45-51). Results: 60 patients (35.3%) had persistent airflow obstruction. Besides differences in simple spirometry values, those patients had decreased DLco, lower PD15 and exhaled NO, and higher sputum eosinophil and neutrophil counts. 71.7% of patients with persistent obstruction fulfilled ATS criteria for severe refractory asthma (SRA), in contrast to 4.5% in the group without persistent obstruction. A cluster analysis identified two clinically relevant clusters: Cluster 1 (n=89, not related to persistent airflow obstruction) included patients not receiving high doses of ICS or oral corticosteroids (CS), with higher PD15 to methacholine, no smoking history and no criteria for SRA; Cluster 2 (n=19, related to persistent airflow obstruction) included patients receiving high doses of ICS and oral CS, lower PD15, again no smoking history, but no criteria for SRA. Conclusions: Patients with persistent airflow limitation present different functional and inflammatory characteristics and may be classified in separate clusters.