European Respiratory Society
Annual Congress 2013

Abstract Number: 2497

Publication Number: P3949

Abstract Group: 4.1. Clinical respiratory physiology, exercise and functional imaging

Keyword 1: Spirometry **Keyword 2:** Epidemiology **Keyword 3:** Lung mechanics

Title: Rate of occurrence of lung function testing abnormalities in Greek ankylosing spondylitis patients

Dr. Charalampos 18118 Mandros charalman@gmail.com MD [1], Dr. Dimitrios 18119 Ntelios ntdimitris@yahoo.gr MD [1], Dr. Ioanna 18120 Tassiou gtassiou@gmail.com MD [1], Dr. Pavlos 18121 Malindretos pavlosmm@hotmail.com MD [1] and Prof. George 18122 Tzelepis gtzelep@med.uoa.gr MD [2]. [1] Internal Medicine, Volos General Hospital, Volos, Magnesia, Greece, 38222 and [2] Pathophysiology, Laiko General Hospital, Athens, Greece .

Body: Introduction: Ankylosing spondylitis (AS) compromises respiratory function by affecting chestwall mechanics and pulmonary parenchyma. Pulmonary function tests from previous studies revealed a restrictive pattern of breathing, ranging from 18 to 57%. Data regarding FRC values are contradictory.(1,2) Objectives: The scope of our study was to evaluate PFTs in a Greek cohort of AS patients and compare our results with similar studies from other groups. Methods: We examined 34 AS patients from our Rheumatology Outpatient Clinic. Data from spirometry, lung volumes, and diffusing capacity were collected for further analysis. Results: Mean and SD values are shown at Table 1.

Lung function tests of AS patients

	Age	Disease Duration	FEV1%	FVC%	FEV1/FVC%	TLC%	FRC%
Mean	44.15	18.53	82	81.11	101.93	77.94	100.37
SD	13.06	12.41	12.75	13.22	9.44	9.4	24.88

Mean disease duration 18 years, which is a significant period at the natural history of the disease itself and its consequences. A significant number of patients (67,6%, 23 out of 34) had TLC values less than 80% of the predicted values. 44% of our patients (15 out of 34) had a restrictive breathing pattern. Conclusions: Our data suggest that in our ankylosing spondylitis patients TLC values were lower than in previous studies. A significant number of our patients had also a restrictive pattern, which seems to be correlated with the disease duration itself. References: 1)Total respiratory resistance and reactance in ankylosing spondylitis and kyphoscoliosis. Van Noord et al. Eur Respir J. 1991;4:945-951 2)Chest wall kinematics and respiratory muscle action in ankylosing spondylitis patients. Romagnoli I., et al Eur Respir J. 2004;24:453-460.