

European Respiratory Society Annual Congress 2013

Abstract Number: 3592

Publication Number: 1799

Abstract Group: 1.1. Clinical Problems

Keyword 1: Adolescents **Keyword 2:** Anti-inflammatory **Keyword 3:** Physiology

Title: Long term administration of anti-TNF α in ankylosing spondylitis (AS) patients – A post-hoc analysis

Dr. Charalampos 21912 Mandros charalman@gmail.com MD ¹, Dr. Dimitrios 21913 Ntelios ntdimitris@yahoo.com MD ¹, Dr. Ioanna 21914 Tassiou gtassiou@gmail.com MD ¹, Dr. Pavlos 21915 Malindretos pavlosmm@hotmail.com MD ¹, Dr. Evangelos 21916 Potolidis potol13@gmail.com MD ¹ and Prof. George 21918 Tzelepis gtzelep@med.uoa.gr MD ². ¹ Internal Medicine, Volos General Hospital, Volos, Greece and ² Pathophysiology, Laiko General Hospital, Athens, Greece .

Body: Introduction: Administration of biologic agents in AS patients is accompanied by a rapid- in the first 2 months-improvement of the clinical parameters associated with the disease itself. Thoraco-abdominal configuration is also improved in the first 3 months of treatment with antiTNFa. Objectives: We tested the hypothesis that long term administration of antiTNFa agents remains also beneficial to PFTs in AS. Methods: We performed a post-hoc analysis of 44 AS patients and we divided them into 2 similar age groups: to those without treatment and to those with at least 3 months on anti-TNF. Data from spirometry, lung volumes, and respiratory induction plethysmography were collected for further analysis. Results: Our results are depicted at Table 1.

Mean (\pm SD) data in two groups

	Group 1 (without treatment) (n=21)	Group 2 (with treatment) (n=23)
Age (years)	43,19(15,34)	43,65(10,4)
Disease duration (mo)	15,61(13,75)	17,26(8,59)
MIPact%pred	82,33(24,16)	97,47(30,34)
MEPact%pred	84,57(20,13)	95,21(24,43)
SNIPact%pred	90,28(26,26)	102,86(23,25)
Seated (angle)	38,42(18)	40,43(19,32)
Standing (angle)	54,76(24,25)	49(20)
Supine (angle)	14,95(13,6)	22,34(18,33)

Anti-TNF α was administered for 28,43 months (\pm 19,81). Muscle strength was better in second group (p=0,84 for MIPact%pred, p=0,05112 for SNIPact%pred and p=0,059 for MEPact%pred). Plethysmography data were inconclusive. Conclusions: We compared 2 similar groups of AS patients and even if the second

group had a longer disease duration, muscle strength data were better, showing that administration of antiTNFa may be associated with a sustained improvement of respiratory parameters. Further cohort studies are needed for more robust results.