European Respiratory Society
Annual Congress 2012

Abstract Number: 2949

Publication Number: P2385

Abstract Group: 5.3. Allergy and Immunology

Keyword 1: Asthma - management **Keyword 2:** Nitric oxide **Keyword 3:** No keyword

Title: Control of allergic rhinitis and asthma test, asthma control test and FeNO in asthma

Dr. Raquel 22641 Melo kelinhacastroemelo@gmail.com MD [1], Dr. Daniela 22642 Alves danielacostaalves@gmail.com MD [2], Dr. Joao 22643 Cruz joaoffcruz@gmail.com MD [2], Dr. Miguel 22644 Guimarães m.guimaraes75@gmail.com MD [1] and Dr. Ricardo 22645 Lima ricardo9lima@hotmail.com MD [1]. [1] Pneumology, Centro Hospitalar Vila Nova Gaia/Espinho, EPE, Vila Nova de Gaia, Portugal and [2] Pneumology, Hospital de Braga, Braga, Portugal .

Body: Introduction: The assessment of asthma control is essential in the follow-up of this disease. Objectives:Assessment of asthma and/or rhinitis control through the application of two questionnaires and the measurement of Fractional Nitric Oxide concentration in exhaled breath (FeNO). Methods: Cross-sectional observational study of patients with asthma and/or rhinitis that, in a two months period, visited a respiratory function laboratory to perform lung functional tests with measurement of FeNO and to whom were applied 2 questionnaires: Control of Allergic Rhinitis and Asthma Test (CARAT) and Asthma Control Test (ACT). Results: 109 patients, 65,7% women, mean age 32,6±17,9years. Of these, 63,3% had asthma and rhinitis, 24,8% had asthma and 11,9% had rhinitis. The mean FeNO was 36±28,4ppb (min/max= 4/115). 58,7% patients were atopic and a statistically significant association was established between atopy and FeNO ($p<0.05$). In patients with positive bronchodilatation test, FeNO values were higher ($p<0.05$).This study demonstrated a statistically significant correlation between the total CARAT (CARATt) and ACT test ($r=0.7$, $p<0.05$), as well as between asthma CARAT sub-score (CARATa) and ACT test ($r=0.8$, $p<0.05$). It was demonstrated a statistically significant association between subjective control of the disease and CARATt, CARATa and ACT ($p<0,05$). Conclusions: There was a statistically significant association between: atopy/positive bronchodilatation test and higher FeNO, and between CARATt/CARATa and ACT test scores. This study highlights the importance of using low cost and easily applicable questionnaires that are validated in the assessment of asthma control.