European Respiratory Society
Annual Congress 2012

Abstract Number: 2041

Publication Number: P2615

Abstract Group: 10.2. Tuberculosis

Keyword 1: Spirometry **Keyword 2:** Health policy **Keyword 3:** Quality of life

Title: Sensitivity and specificity of St. George's Respiratory Questionnaire in predicting low lung function in patients treated for pulmonary tuberculosis

Dr. Mikhail 3467 Chushkin mchushkin@yandex.ru MD [1,2], Dr. Elena 3468 Bogorodskaya el_bogorodskaya@mail.ru MD [1], Prof. Valentina 3469 Aksenova v.a.aksenova@mail.ru MD [1], Dr. Vadim 18076 Koroev koroeff.lancet@yandex.ru MD [1], Dr. Sergey 3470 Mandrykin mandr2003@mail.ru MD [2], Dr. Dmitriy 3471 Zhutikov dmzh-md@yandex.ru MD [2], Dr. Eduard 3472 Tikhokhod tikhokhod.ed@yandex.ru MD [2] and Dr. Sergey 3473 Smerdin smerdin_030@rambler.ru MD [1]. [1] Pulmonary Physiology, Research Institute of Phthisiopulmonology, I.M. Sechenov First Moscow State Medical University, Moscow, Russian Federation, 127994 and [2] Rehabilitation, Medical Center, Central Bank of Russian Federation, Moscow, Russian Federation, 117593 .

Body: Tuberculosis is associated with frequent pulmonary impairment. This supports performance of pulmonary function tests in the course of treatment and after a cure but until now pulmonary function testing had not been included in tuberculosis treatment guidelines. The aim of the study was to assess the usefulness St. George's Respiratory Questionnaire (SGRQ) for predicting low lung function in patients after treatment of pulmonary tuberculosis. Methods: we investigated 226 patients older than 40 years who were cured for pulmonary tuberculosis (145 males and 81 females). Quality of Life was studied by SGRQ. Pulmonary function was studied by spirometry. Receiver Operating Characteristic (ROC) curve analysis was used for assessment of sensitivity and specificity. Results: Out of 226 patients, 97 (42,9%) had low lung function (FEV1 < 80% predicted). According to ATS/ERS criteria we classified 8,8% of subjects as having mild impairment; 20,8% of subjects as having moderate impairment; and 13,3% of subjects as having severe impairment. According ROC curve analysis for low lung function, when 29% of Total SGRQ score was chosen as the cut-off, the sensitivity, specificity, positive value and negative value were 57.7%, 83%, 72%, and 72%, respectively. Area under the ROC curve (AUC) was 0,75 (95% confidential interval [CI] 0,69 to 0.81; p<0.001). AUC was a bit bigger in male than in female (0,79 vs 0,69). Conclusion: Total SGRQ of 29% may be the best cut-off in low pulmonary function detection. Higher Total SGRQ score was associated with higher probability of low pulmonary function.