

European Respiratory Society Annual Congress 2012

Abstract Number: 2320

Publication Number: P430

Abstract Group: 10.2. Tuberculosis

Keyword 1: Tuberculosis - diagnosis **Keyword 2:** IGRA (Interferon [gamma]) **Keyword 3:** No keyword

Title: Comparison of interferon gamma assay and tuberculin skin test in household TB contacts

Dr. Svetlana 16305 Kasikovic Lecic sklecic@sbb.rs MD , Prof. Dr Slobodan 16306 Pavlovic sklecic@sbb.rs MD , Prof. Dr Vesna 16307 Kuruc vesnakuruc@gmail.com MD , Dr. Miroslav 16308 Ilic micailic@yahoo.com MD and Dr. Darinka 16309 Kukavica sklecic@sbb.rs MD . ¹ Clinic for Granulomatous Diseases, Institute for Pulmonary Diseases of Vojvodina, Sremska Kamenica, Voivodina, Serbia, 21204 .

Body: Background: Identification and treatment of active and latent TB infection among household contacts is an effective strategy for TB control. Aim: To compare the QuantiFERON-TB Gold in tube assay (QFT) to tuberculin skin testing (TST) for detecting TB infection among household contacts. Methods: The participants were 50 immunocompetent household TB contacts. All the participants were interviewed using a questionnaire and tested by the QFT and TST. TST results were analyzed at 5 mm and 15 mm cut-off. The QFT test was interpreted following the manufacturer's criteria. In all the subjects with a positive TST (≥ 15 mm)/QFT, X-ray was performed. Results: All contacts had previously been vaccinated and revaccinated with BCG and they had been screened with the TST at least once in the past. 52% (26/50) household contacts had positive TST (≥ 5 mm) results, and 12% (6/50) had TST ≥ 15 mm. 18% (9/50) had a positive QFT finding. The comparison of TST (threshold 5 mm) and QFT results revealed a low agreement: 62% (31/50); ($k=0.259$). The comparison of TST (threshold 15 mm) and QFT results revealed a moderate agreement: 90% (45/50); ($k=0.611$). Active TB was detected in 4% (2/50) subjects. Conclusion: Despite the intense exposition of immunocompetent household TB contacts to a highly symptomatic index case, transmission of *M. tuberculosis* rarely occurred. The data indicate that a previous BCG vaccination and/or TST testing could be a reason for the false positive TST results. Two tests can be used in the diagnostic algorithm of TB infection in testing household contacts. In order to apply the TST a higher cut off values (≥ 15 mm) should be used for positivity. The QFT assay could replace the TST in BCG vaccinated population.