

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 3309

**Publication Number:** P506

**Abstract Group:** 10.2. Tuberculosis

**Keyword 1:** Children **Keyword 2:** Tuberculosis - diagnosis **Keyword 3:** Adolescents

**Title:** The information value of DIASKINTEST in diagnostics of pediatric TB

Dr. Olga V. 19848 Kasimtseva skasimtseva@mail.ru MD , Dr. Nataliya L. 19849 Karpina skasimtseva@mail.ru MD and Prof. Dr Olga V. 19850 Demikhova skasimtseva@mail.ru MD . <sup>1</sup> Consulting Department, Central TB Research Institute, Moscow, Russian Federation .

**Body:** Aim: To evaluate effectiveness of DIASKINTEST (DST) in detecting TB in children. Materials and methods: We studied 157 cases aged 3-17 to exclude local TB. All the cases had positive Mantoux results with 2TU, underwent computed tomography (CT) and DST. Pulmonary TB was excluded in 99, confirmed in 58 cases. Results: Negative DST results were obtained in 63 out of 157 cases (40.1%), positive – in 94 out of 157 cases (59.9%). Negative DST results were obtained in 56 out of 99 healthy children infected with *M. tuberculosis* ( $56.6 \pm 5.0\%$ ). In TB cases it was 4 times less frequent – in 7 out of 58 cases ( $12.1 \pm 4.3\%$ ),  $p < 0.001$ . Positive DST results were established twice more frequently in TB cases ( $87.9 \pm 4.3\%$ ), 51 out of 58 cases, than in healthy infected children ( $43.4 \pm 5.0\%$ ), 43 out of 99 children,  $p < 0.001$ . These infected children with positive DST results were additionally studied; extrapulmonary TB was excluded. Out of 63 cases with negative DST results, 7 cases developed TB ( $11.1 \pm 4.0\%$ ). Out of 94 cases with positive DST results, 51 cases developed TB ( $54.3 \pm 5.1\%$ ), which 4.9 times exceeded the similar rate in the cases with negative DST,  $p < 0.001$ . Conclusions: 1. The frequency of negative DST results in healthy children infected with *M. tuberculosis* was 56.6% – specificity of the method. The frequency of positive DST results in TB cases was 87.9% – sensitivity of the method. 2. Detection of positive DST results in healthy individuals infected with *M. tuberculosis* requires further studies and dynamic follow-up. 3. Among cases with positive DST results the frequency of TB was 4.9 higher than among cases with negative DST results. The obtained data allow using DST along with other methods to diagnose TB in children.