Radiologic findings in patients with smear-negative pulmonary tuberculosis

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ABSTRACT

Aim and objective: Tuberculosis (TB) is a chronic lung infection that contaminated 1/3 of the people in the world and that causes 2 million deaths and 9 million infected with the disease. Sputum smear and Ziehl-Neelsen staining are the best methods for diagnosis of TB, but chest X-ray is another method that can help diagnose pulmonary TB, and it is especially helpful for smear-negative patients. The aim of this study is to show that radiologic findings can assist in diagnoses in pulmonary TB smear-negative groups.

Methods: In this descriptive analytical study, 100 patients with smear-negative pulmonary TB during the time period 2010–2011 were enrolled. The standard World Health Organization (WHO) definition of smear-negative was used in this study. All patients had a chest X-ray (PA and lateral).

Results: Of the 100 patients, 63.5% were female and 97% Iranian; 25% of patients had ESR more than 50 frequency. Calcification, Hilar adenopathy, incomplete pulmonary destruction and bronchiectasis was 27%, 21%, 14% and 11%, respectively, but frequent reticulonodular infiltration and pulmonary fibrosis (41% and 23%, respectively) were not significant (P = 0.2).

Conclusion: Radiologic findings for pulmonary TB cannot be used to diagnose, but are rather suggestive.

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