Pleural tuberculosis in children and adolescents: a difficult diagnosis?

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Abstract

Objective This study aimed to describe the clinical and laboratory findings of patients diagnosed with pleural tuberculosis (PT) at two tertiary university hospitals in Southern Brazil. Methods Patients below 18 years of age admitted to the study hospitals were retrospectively evaluated. Medical and epidemiological history, tuberculin skin test (TST) results, radiological and pathological findings, and pleural fluid (PF) analysis were retrieved from health records. Results Ninety-two patients with PT were identified during the study period. Among them, 51 (55%) were males. The mean age was 10.9 years old. Twenty-one percent was represented by children aged six years or less. The most common symptoms were fever (88%), cough (72%) and chest pain (70%). The time between the onset of symptoms and diagnosis varied between 2 and 300 days, with a median of 16 days. Unilateral pleural effusion was described in 96% of the cases. Lymphocyte predominance was found in 90% of PF samples. The adenosine deaminase dosage of PF was greater than 40 U/L in 85% of the patients. Prior diagnosis of community acquired pneumonia and antibiotic use were observed in 76% of the cases. Conclusion We suggest consider the diagnosis of PT in children and adolescents with the following characteristics: fever, cough and thoracic pain as presenting symptoms; history of contact with tuberculosis; Mantoux test? 10 mm; unilateral pleural effusion; lymphocytes predominance in PF sample; pleural fluid ADA greater than 40 U/L and poor response to antibiotics prescribed for community-acquired pneumonia.

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