

'TB OR NOT TB?': The Importance of Appropriate Screening

'TB OR NOT TB?': A Importância de um Rastreo Adequado

Keywords: Child; Interferon-gamma Release Tests; Tuberculin Test; Tuberculosis/diagnosis

Palavras-chave: Criança; Testes de Libertação de Interferon-gama; Teste tuberculínico; Tuberculose/diagnóstico

A three-month-old male infant was admitted due to disseminated tuberculosis (TB). His father and his cousin had been diagnosed with pulmonary TB two months earlier and isoniazid [H], rifampicin [R], pyrazinamide [Z] and ethambutol [E] were prescribed. The household contacts were not screened. In the following month, the infant's siblings became symptomatic and were diagnosed with TB. We referred the household contacts to the local TB screening center. Our infant initiated chemoprophylaxis, but interferon-gamma release assay (IGRA) or imaging tests were not performed. As TB disease had not been excluded, we proceeded with the investigation, which led us to the diagnosis of pulmonary, ganglionic, and meningeal TB. By this time, the infant's father was at home and his drug susceptibility test for *Mycobacterium tuberculosis* (DST-MT) showed resistance to H. His cousin's condition worsened and he was re-admitted. The drug schemes of all patients were changed to RZE with levofloxacin.

TB disease continues to be a global public health problem.¹ Even though nowadays it can be preventable and curable, most cases are still misdiagnosed.

According to the Portuguese recommendations for TB screening in paediatric contacts,² the strategy for the

elimination of this disease includes early identification of active TB and of TB infection. High risk contacts, such as this infant and his siblings under 5 years of age and household contacts with TB, should be screened very early based on immunological tests and chest radiography. Chemoprophylaxis is recommended when active TB is excluded and the chosen antibacillary drugs should acknowledge the resistance pattern of the index case.

In Portugal, the incidence of TB is below 20 cases per 100 000 habitants.³ It mainly occurs by spatiotemporal clusters and the screening of close contacts must be a priority and should be performed as early as possible and in an appropriate manner. Otherwise, the disease will become a real public health problem in our country. In order to overcome missed opportunities to prevent active TB, strengthening of healthcare networks by involving physicians included in screening procedures, education for families, medical training, and development of shared and computerized tools to improve data completeness, communication, and follow-up of patients have been suggested.⁴ Communication between hospital departments and community services is also desirable.

Our aim is to raise awareness of the importance of tuberculosis screening in preventing serious disease. The articulation between the different healthcare services is crucial in the fight against this public health problem.

DISCLAIMER

This study was delivered as a E-Poster presentation at the ESPID 2020 Virtual Meeting, 26th-29th October.

INFORMED CONSENT

Obtained.

REFERENCES

1. Zaman K. Tuberculosis: a global health problem. *J Health Popul Nutr.* 2010;28:111-3.
2. Carvalho A, Carvalho I, Marques L, Pereira L, Brito MJ, Duarte D. Consenso sobre a abordagem da criança exposta a doente com tuberculose. *Acta Pediatr Port.* 2014;45:242-51.
3. Direção Geral de Saúde. Tuberculose em Portugal 2018 (dados provisórios) - Programa Nacional para a Tuberculose. [accessed 2020 Dec 30]. Retrieved from: <https://www.dgs.pt/portal-da-estatistica-da-saude/diretorio-de-informacao/diretorio-de-informacao/por-serie-1104304-pdf.aspx?v=%3d%3dDwAAAB%2bLCAAAAAAABAArySztzVUy81MsTU1MDAFahzFEfkPAAAA>.
4. Ollier V, Antoun F, Thouvenin G, Faye A, Kone-Paut I, Benoist G, et al. Potentially preventable tuberculosis cases in children exposed to a contaminant case. *Arch Pediatr.* 2018;25:421-5.

Ana Pereira LEMOS✉¹, Ana Margarida GARCIA¹, Flora CANDEIAS¹, Maria João BRITO¹

1. Unidade de Infeciologia. Serviço de Pediatria. Hospital Dona Estefânia. Centro Hospitalar e Universitário Lisboa Central. Lisboa. Portugal.

Autor correspondente: Ana Pereira Lemos. ana1645@gmail.com

Recebido: 10 de janeiro de 2021 - Aceite: 08 de fevereiro de 2021 - Online issue published: 01 de abril de 2021

Copyright © Ordem dos Médicos 2021

<https://doi.org/10.20344/amp.15687>

