

## The Pediatric Perspective: A Comment on “Tuberculosis Screening of Ukrainian Refugees in Portugal”

### A Perspetiva da Pediatria: Um Comentário sobre “Rastreamento de Tuberculose em Refugiados da Ucrânia em Portugal”

**Keywords:** Child; Mass Screening; Portugal; Refugees; Tuberculosis/epidemiology; Ukraine

**Palavras-chave:** Criança; Portugal; Rastreamento; Refugiados; Tuberculose/epidemiologia; Ucrânia

Dear Editor,

Since our Pediatric Tuberculosis Reference Center (TBRC) has screened Ukrainian refugee children for tuberculosis (TB), we read with interest the paper published by Rita Ferro *et al.*<sup>1</sup> The authors' aim was to understand how screening was carried out by different centers, and we would like to report our experience.

Tuberculosis screening was carried out at a Pediatric TBRC in the North of Portugal, in April 2022, according to our TB post-exposure screening protocol and before the European Centre for Disease Prevention (ECDC) recommendations were published.<sup>2</sup> Early screening for active TB and latent infection (LTBI) was performed in all pediatric refugees living in the Center's catchment area. The children were accompanied by a legal guardian and an interpreter. The methodology included an initial evaluation by the nursing team with epidemiological and symptomatic investigation (personal history or previous contact with TB, chronic diseases, usual medication, and symptoms, with a focus on prolonged respiratory symptoms, persistent unexplained fever, weight loss, and night sweats). BCG vaccination status was assessed in children under the age of six. If there was a history of exposure or risk factors, the child would be referred for an immunologic test (tuberculin skin test and/or interferon gamma release assay). Chest radiography was performed in all patients. The children were then evaluated by a pediatrician. An additional TB investigation would be performed in case of positive symptom screening or abnormal chest radiography.

A total of 33 Ukrainian children were seen at the Pediatric TBRC (median age 10 years). None had previous exposure to TB or risk factors. None had respiratory or constitutional symptoms or changes on physical examination. No changes were found on chest radiograph. Even though BCG is included in the immunization schedule, vaccination coverage in Ukraine is not ideal (86% in 2021) and four

children were not vaccinated.<sup>3</sup> Despite Ukraine's intermediate incidence of tuberculosis (73 per 100 000 inhabitants), Portugal's Directorate-General of Health recommends vaccination for migrants from countries with an incidence above 40 per 100 000.<sup>4</sup> Therefore, after the exclusion of disease and LTBI in that group, those under six years old were vaccinated. Unlike what was observed in the article by Ferro *et al.*, no diagnosis of LTBI was made.

Our findings support the ECDC recommendations, showing that easy access to health care seems sufficient to detect risk groups, thus eliminating the need for universal screening in the pediatric age.<sup>2</sup> Nevertheless, the population that migrated to Portugal in February and March 2022 was comprised of elderly people, women, and children, while young adult men have the highest rate of TB infection.

With this comment, we wish to highlight that healthcare professionals need to be aware of TB among migrants. Looking for symptoms suggestive of tuberculosis and risk factors remains a recommendation in every medical contact with refugees. A prompt referral to the TBRC should be made if tuberculosis is suspected. Finally, BCG vaccination should be provided for those without active or latent TB.

#### AUTHOR CONTRIBUTIONS

MB: Data analysis and interpretation, writing of the manuscript.

MS, LB, IC: Data interpretation and critical review of the manuscript.

#### PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

#### DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

#### COMPETING INTERESTS

The authors have declared that no competing interests exist.

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