From Tuberculosis Screening to a Swyer-James Syndrome Diagnosis

Vanessa Gorito, Raquel Lopes de Bragança, Joana Ferreira, Luísa Guedes Vaz

Port J Pediatr 2020;51:144-5 DOI: https://doi.org/10.25754/pjp.2020.18376

A 14-year-old adolescent, previously healthy, after having contact with an uncle who was diagnosed with tuberculosis, underwent a chest radiography showing asymmetry (Fig. 1). The interferon gamma release assay was negative. A computed tomography scan was performed and revealed a unilateral pulmonary hyperlucency with the right lung appearing less dense (Fig. 2), thereby leading to the diagnosis of Swyer-James syndrome, a rare condition characterized by hypoplasia and/or agenesis of the pulmonary arteries resulting in parenchyma hypoperfusion.¹

Swyer-James syndrome usually occurs following a respiratory infection in childhood, but the etiology is not clear.² The diagnosis is supported by radiography and computed tomography.³ Affected individuals may be asymptomatic or, more commonly, have respiratory symptoms. Sometimes surgical intervention is needed.⁴ This case enabled us to diagnose a rare syndrome incidentally and to reinforce the prevention of the possible appearance of clinical symptoms.

Keywords: Adolescent; Lung, Hyperlucent/diagnostic imaging



Figure 1. Chest radiography showed unilateral hyperlucency in the right lung.



Figure 2. Computed tomography scan images. Air trapping and decreased vascularity in the hyperlucent lung confirming the diagnosis.

Pediatric Pulmonology Unit, Pediatrics Department, Maternal-Pediatric Center, São João Hospital and University Center, Porto, Portugal Corresponding Author

Vanessa Alexandra Oliveira Gorito https://orcid.org/0000-0002-9452-968X

vanessaoliveiragorito@gmail.com

Serviço de Pediatria, Unidade de Pneumologia Pediátrica, Centro Materno-Pediátrico, Centro Hospitalar e Universitário de São João, Alameda Prof. Hernâni Monteiro, 4200-319 Porto, Portugal

Received: 27/07/2019 | Accepted: 15/10/2019 | Published: 02/04/2020

© Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY-NC. No commercial re-use.



WHAT THIS REPORT ADDS

• This case highlights the value of a careful and systematic review of complementary studies as radiographies in order not to miss unexpected diagnoses.

• Valuing an abnormal image founded incidentally may allow us to diagnose a rare condition.

• Despite the absence of symptoms, this diagnosis highlights the focus on prevention, namely the eviction of tobacco and other environmental exposures.

Conflicts of Interest

The authors declare that there were no conflicts of interest in conducting this work.

Funding Sources

There were no external funding sources for the realization of this paper.

Provenance and peer review

Not commissioned; externally peer reviewed

Consent for publication

Consent for publication was obtained.

Confidentiality of data

The authors declare that they have followed the protocols of their work centre on the publication of patient data.

References

1. Fregonese L, Girosi D, Battistini E, Fregonese B, Risso FM, Bava GL, et al. Clinical, physiologic, and roentgenographic changes after pneumonectomy in a boy with Macleod / Swyer-James syndrome and bronchiectasis. Pediatr Pulmonol 2002; 34:412-41. doi: 10.1002/ppul.10178.

2. Tortajada M, Gracia M, García E, Hernández R. Consideraciones diagnosticas sobre el llamado sindrome del pulmon hiperclaro unilateral (sindrome de Swyer-James o de Mc-Leod). Allergol Immunopathol 2004;32:265-70. doi: 10.1016/s0301-0546(04)79253-8

3. Gómez Belda AB, Martínez-Moragón E, Fernández Fabrellas

E. Sindrome de Swyer-James: Aportaciones diagnosticas de la tomografia computarizada helicoidal. Arch Bronconeumol 2000;36:421-2.

4. Tasaki A., Nakanishi R. Lung volume reduction surgery for a professional athlete with Swyer-James syndrome. Ann Thorac Surg 2005;80:342-4. doi: 10.1016/j.athoracsur.2003.12.017

