

Clinical image

Pulmonary Hyalinizing Granuloma: A Diagnostic Challenge[☆]

Granulomas hialinizantes pulmonares, un reto diagnóstico

Ana Belén Gil Guerra,* María Rosa López Pedreira, Pilar Cartón Sánchez

Servicio de Radiodiagnóstico, Hospital Clínico Universitario de Valladolid, Valladolid, Spain



A 57-year-old woman, smoker with no other history of interest, presented with a 1-week history of dyspnea, cough with expectoration, and low-grade fever. Chest X-ray showed multiple bilateral nodular images, some of which were cavitary (Fig. 1a). Computed tomography (CT) confirmed the presence of multiple cavitary masses in both hemithoraxes, with amorphous calcifications (Figs. 1b and c). Serology for hydatidosis was negative, and sputum and bronchial aspirate cultures for mycobacteria on Löwenstein medium were also negative.

Transbronchial biopsy was inconclusive, so a surgical biopsy was performed. Macroscopic examination showed at least 4 whitish nodules of hard consistency with pleural retraction and pleuropulmonary adhesions. The nodule submitted for histological study consisted of dense collagen tissue, with central calcium microdeposits and accumulations of lymphocytes (Fig. 1d). Findings were compatible with pulmonary hyalinizing granuloma (PHG).

PHG is a rare disease^{1,2} that typically occurs in middle-aged patients with non-specific respiratory manifestations or general symptoms.² Invasive techniques are necessary for histologic diagnosis.¹ Although the physiopathology of this entity is unclear, the origin is assumed to be immunological.^{1,2} Prognosis is good,¹ and treatment is not usually required, although corticosteroids have demonstrated efficacy.^{1,2}

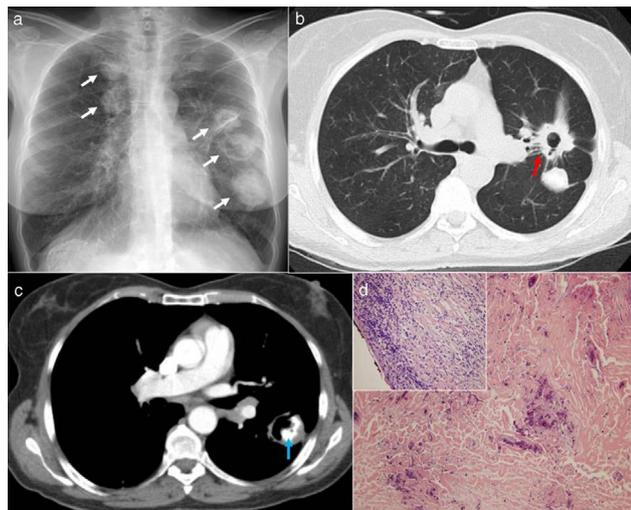


Figure 1. (a) Standard chest X-ray: multiple nodular images in both lung fields, some cavitary; (b) chest CT scan (pulmonary parenchyma window): pulmonary nodules with central cavitation and pleuroparenchymal retraction (arrow); (c) chest CT scan (mediastinum window): cavitary nodule with amorphous internal calcification (arrow); and (d) histology, showing a formation of dense collagen tissue with central calcium microdeposits and accumulations of lymphocytes in the central and peripheral areas (hematoxylin-eosin 40 \times).

References

1. Lhote R, Haroche J, Duron L, Girard N, Lafourcade MP, Martin M, et al. Pulmonary hyalinizing granuloma: a multicenter study of 5 new cases and review of the 135 cases of the literature. *Immunol Res.* 2017;65:375–85.
2. Pfeifer K, Mian A, Adebawale A, Alomari A, Kalra V, Krejci E, et al. Radiographic and pathologic manifestations of uncommon and rare pulmonary lesions. *Can Assoc Radiol J.* 2016;67:179–89.

[☆] Please cite this article as: Guerra ABG, Pedreira MRL, Sánchez PC. Granulomas hialinizantes pulmonares, un reto diagnóstico. *Arch Bronconeumol.* 2018;54:479.

* Corresponding author.

E-mail address: anagil.guerra@gmail.com (A.B.G. Guerra).