

Clinical Image

[Translated article] Iatrogenic Segmental Pulmonary Artery Pseudoaneurysm Due to Necrotizing Pneumonia After Intrapulmonary Nasogastric Tube Placement



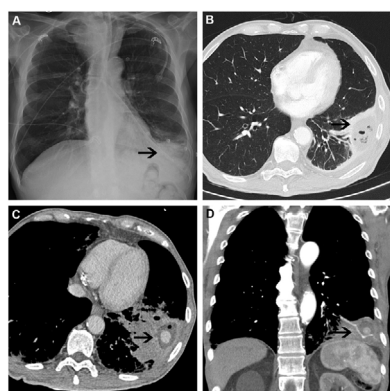
Pseudoaneurisma iatrogénico de arteria pulmonar segmentaria por neumonía necrosante tras colocación de sonda nasogástrica intrapulmonar

Carlos Guerrero<sup>a,\*</sup>, Daniel Martínez<sup>b</sup>, Ivan Vollmer<sup>c</sup>, Abel Gómez-Caro<sup>a</sup>

<sup>a</sup> Servicio de Cirugía Torácica, Instituto Clínico Respiratorio, Hospital Clínic, Barcelona, Spain

<sup>b</sup> Servicio de Anatomía Patológica, Centro de Diagnóstico Biomédico, Hospital Clínic, Barcelona, Spain

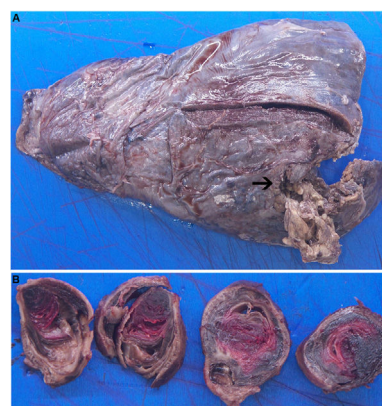
<sup>c</sup> Servicio de Radiología, Centro de Diagnóstico por la Imagen, Hospital Clínic, Barcelona, Spain



**Fig. 1.** (A) Chest X-ray showing the nasogastric tube (NGT) with distal tip (arrow) in the left lower lung and alveolar infiltrate. (B) Chest CT of the left lower lung showing an area of hypodense consolidation containing air bubbles (arrow) suggestive of necrotizing pneumonia. (C, D) Axial and coronal slices, respectively, of the chest CT showing image of cavitory consolidation in left lower lung (arrow) containing active bleeding.

We report the case of a 72-year-old man with oropharyngeal squamous carcinoma treated with chemoradiotherapy, who had a nasogastric tube (NGT) placed due to dysphagia associated with mucositis. After accidental displacement, the NGT was repositioned in the emergency department. The patient presented 24 h later with a complaint of dyspnea and left chest pain. The chest X-ray showed the distal tip of the NGT in the left lower lobe (Fig. 1A). The suggested diagnosis was chemical pneumonitis, intravenous antibiotic therapy was started, and he was admitted. During his stay, the chest computed tomography (CT) showed an image suggestive of resolving necrotizing pneumonia (Fig. 1B) and he was discharged with oral antibiotic therapy.

The patient presented 2 months later with life-threatening hemoptysis. CT angiography showed increased cavitory consolidation and an image of



**Fig. 2.** (A) Left lower lung specimen showing acute necrotizing pneumonia with abscess in the lower part (arrow). (B) Macroscopic slices of the pseudoaneurysm showing the bronchial wall with associated bleeding.

active bleeding: segmental pulmonary artery pseudoaneurysm could not be ruled out (Fig. 1C, D). Left lower lobectomy was performed and he was discharged 3 days later.

The histopathology study reported acute necrotizing pneumonia with abscess and ulceration of the bronchial wall, associated bleeding, and a foreign-body giant cell reaction (Fig. 2A, B).

Iatrogenic pulmonary artery pseudoaneurysm is a rare entity occasionally associated with the use of intravascular catheters or surgical reconstruction of the pulmonary artery.<sup>1</sup> Surgical repair is the appropriate approach in cases that are symptomatic or increasing in size.<sup>2</sup>

## References

1. Poplasky MR, Rozenblit G, Rundback JH, Crea G, Maddineni S, Leonardo R. Swan-Ganz catheter-induced pulmonary artery pseudoaneurysm formation: three case reports and a review of the literature. *Chest*. 2001;120:2105–11. <https://doi.org/10.1378/chest.120.6.2105>. PMID: 11742949.
2. Vistarini N, Aubert S, Gandjbakhch I, Pavie A. Surgical treatment of a pulmonary artery aneurysm. *Eur J Cardio-Thorac Surg*. 2007;31:1139–41. <https://doi.org/10.1016/j.ejcts.2007.03.014>.

DOI of original article: <https://doi.org/10.1016/j.arbres.2021.11.008>

\* Corresponding author.

E-mail address: [carlosguerrermartin@gmail.com](mailto:carlosguerrermartin@gmail.com) (C. Guerrero).

<https://doi.org/10.1016/j.arbres.2021.11.015>

0300-2896/© 2021 SEPAR. Published by Elsevier España, S.L.U. All rights reserved.