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Clinical Image

Agenesis of the Left Pulmonary Artery, as Incidental Finding

Agenesia de la arteria pulmonar izquierda como hallazgo incidental

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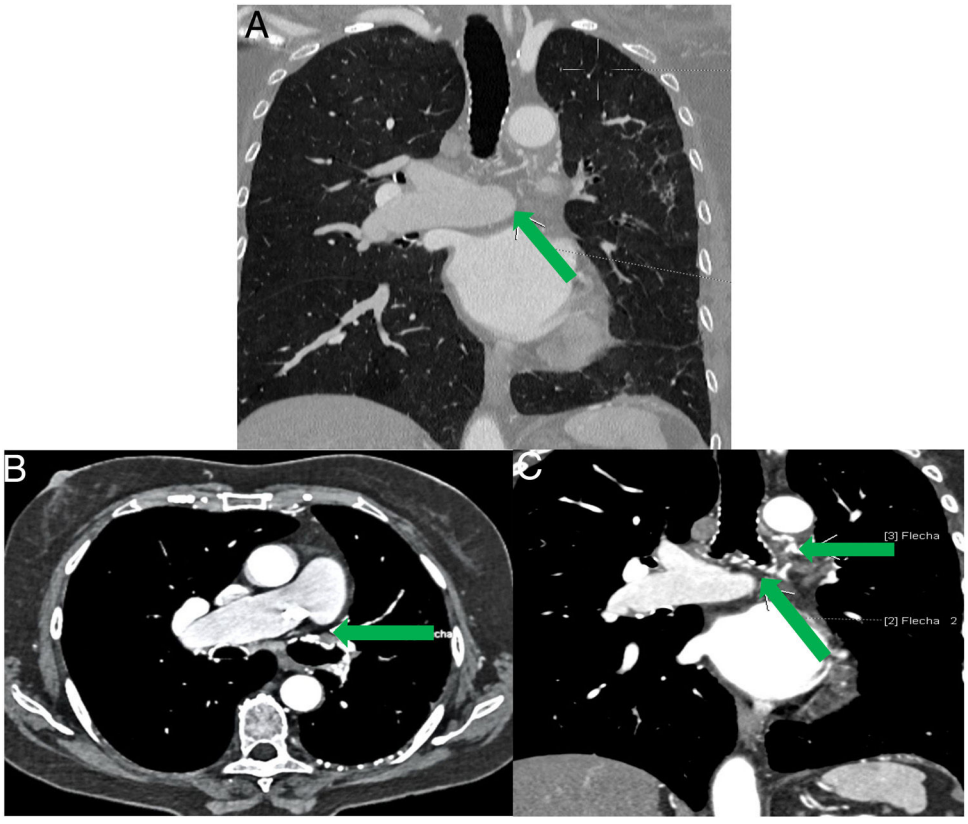

Fig. 1. (A) The absence of the left pulmonary artery and ipsilateral pulmonary hypoplasia in a coronal section of the pulmonary window. (B) Axial view of the mediastinal window showing contrast uptake only in the right pulmonary artery. (C) Coronal section in mediastinal window, showing hypertrophy of bronchial arteries with compensation for the agenesis of the left pulmonary artery.

A 77-year-old female, with no respiratory history of interest, she consults for persistent respiratory infection symptoms of one month of evolution despite optimized medical treatment. In chest X-ray we did not observe pathological findings, so computed chest tomography (CT) with intravenous contrast (IV) was indicated and showed unilateral agenesis of the left pulmonary artery and ipsilateral pulmonary hypoplasia (Fig. 1).

Unilateral pulmonary artery agenesis is a rare and low prevalence case, with an estimated prevalence of one per

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200,000–300,000 individuals.[1] It is mainly secondary to an anomaly in the rotation and migration of the sixth primitive aortic arch in the fourth or fifth week of embryonic development. The right pulmonary artery agenesis is more frequent and has fewer complications since it is less associated with other malformations than the left one. It is usually diagnosed in childhood after repeated respiratory infections and incidentally in adults by imaging test.[2]

Currently, the most accepted treatment is conservative management in asymptomatic patients, and surgery in symptomatic patients.[2]

Pulmonary artery agenesis, although a rare disorder, should be considered as a differential diagnosis in patients with persistent infectious respiratory symptoms.

Informed consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

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Authors' contributions

All authors have contributed significantly to the research and preparation, revision and final production of the manuscript and approved its submission.

Conflicts of interest

The authors declare that they have no conflict of interest.

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