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Fibrosing Mediastinitis and Complete Right Pulmonary Artery Occlusion

A 53-year-old woman with chronic cough, exertional dyspnea, and progressive chest pain presented with tachycardia and low oxygen saturation (86% on room air). She had a history of gastroesophageal reflux disease, paint fume exposure, and pulmonary histoplasmosis. Cardiac evaluation was unremarkable, but chest radiography showed a prominent pulmonary artery silhouette and decreased vascularity in the right lung, suggesting pulmonary embolism. Pulmonary computed tomography (CT) angiography was performed using a dual-energy CT (DECT) system, and CT revealed a right hilar partially calcified soft-tissue lesion obliterating the right main pulmonary artery and total occlusion of the right main pulmonary artery. Additionally, CT iodine density map images demonstrate total perfusion defect in the right pulmonary artery (Figure 1). Bronchoscopy and biopsy confirmed fibrosing mediastinitis with caseous necrosis and dystrophic calcification. The patient was started on oxygen supplementation and corticosteroids. At 1-year follow-up, her condition remained stable.

Fibrosing mediastinitis involves fibroinflammatory encasement of mediastinal structures, frequently secondary to Histoplasma capsulatum. This case

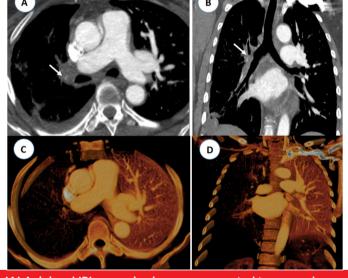


Figure 1. (A) Axial and (B) coronal pulmonary computed tomography angiography (CTA) images show a right hilar partially calcified soft-tissue lesion (arrows) obliterating the right main pulmonary artery. (C) Axial and (D) coronal computed tomography iodine density map images demonstrate total perfusion defect in the right lung, no perfusion within the right hilar mass, and abrupt occlusion of the right pulmonary artery.



E-PAGE ORIGINAL IMAGE



Department of Radiology, University of Chicago Medicine, Chicago, Illinois, United States

Corresponding author: Furkan Ufuk ⊠ furkan.ufuk@hotmail.com

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Copyright@Author(s) - Available online at anatoljcardiol.com. Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. underscores the severe vascular complications, including complete arterial occlusion and significant perfusion deficits.^{1,2} Dual-energy CT provided detailed anatomic and functional insights, emphasizing its value in diagnosing and monitoring this rare entity. Close imaging surveillance is vital to detect any progression or complications such as recurrent infections, pulmonary hypertension, or respiratory failure.³

Informed Consent: Informed consent was obtained from the patient for the anonymous use of materials taken from him in all kinds of research, following the necessary procedures.

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