Archivos de Bronconeumología 61 (2025) 448–449

Sociedad Española de Neumología y Cirugía Torácica SEPAR

ARCHIVOS DE Bronconeumología

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Clinical Image

Double Trouble in a Breast Cancer Patient Presenting With Dyspnea

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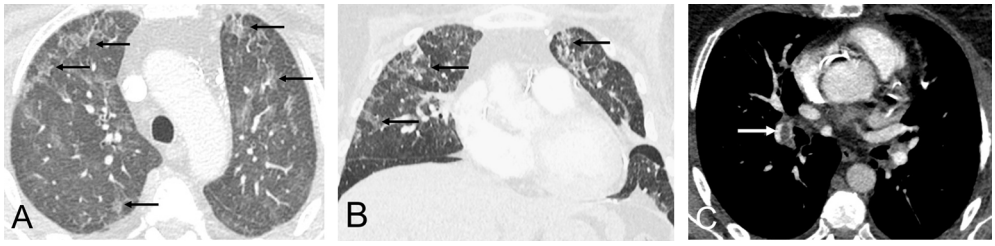

Fig. 1. (A and B) Axial (A) and coronal (B) CT images (lung window) show geographic ground-glass attenuation opacities in both lungs (arrows), predominantly in the upper lobes. (C) Axial CT image (mediastinal window) demonstrates a filling defect in the right inferior pulmonary artery (arrow).

A 49-year-old metastatic breast cancer patient who was taking trastuzumab deruxtecan (T-DXd, an antibody–drug conjugate) presented with dyspnea and dry cough. A chest radiograph showed subtle bilateral opacities. An emergency contrast-enhanced thoracic CT confirmed bilateral ground-glass opacities (Fig. 1A and B) but also revealed a bilateral pulmonary embolism (Fig. 1C). Since the patient was afebrile, a presumptive diagnosis of lung toxicity secondary to T-DXd was made (bronchoalveolar lavage performed 48 h later ruled out an infectious cause). The patient responded well to the discontinuation of T-DXd and the administration of corticosteroids and anticoagulants. Pulmonary toxicity occurs in up to 14% of patients being treated with T-DXd, a drug used for HER2-positive unresectable/metastatic breast cancer. T-DXd lung toxicity, unlike other drug-related toxicities, is unique because of the increased risk of progression to severe illness (grades 3–4 of pneumonitis) and because early detection of grade 1 pneumonitis may allow for continuing treatment. In contrast, evolution to grade 2 (or a higher grade of pneumonitis) requires permanent discontinuation of T-DXd.[1] Patients with breast cancer (particularly with metastatic forms of the disease) are also at increased risk for thromboembolic disease.[2] Our case illustrates well the possibility of a breast cancer patient developing two potentially serious thoracic complications simultaneously as well as the diagnostic potential of chest CT for the correct diagnostic and therapeutic management of both complications.

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

The authors declare that they have not used any type of generative artificial intelligence for the writing of this manuscript, nor for the creation of images, graphics, tables, or their corresponding captions.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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https://doi.org/10.1016/j.arbres.2025.03.011
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Conflicts of Interest

The authors declare not to have any conflicts of interest that may be considered to influence directly or indirectly the content of the manuscript.

References

1. Perachino M, Blondeaux E, Molinelli C, Ruelle T, Giannubilo I, Arecco L, et al. Adverse events and impact on quality of life of antibody-drug conjugates in the treatment of metastatic breast cancer: a systematic review and meta-analysis. Eur J Clin Invest. 2025;13:e70001, http://dx.doi.org/10.1111/eci.70001.
2. Khan UT, Walker AJ, Baig S, Card TR, Kirwan CC, Grainge MJ. Venous thromboembolism and mortality in breast cancer: cohort study with systematic review and meta-analysis. BMC Cancer. 2017;17:747, http://dx.doi.org/10.1186/s12885-017-3719-1.