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Clinical Image Alectinib-Induced Diffuse Alveolar Hemorrhage

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Fig. 1. Chest computed tomography shows bilateral scattered ground-glass opacities with thickening of the interlobular septa (A–C, white arrows). Bloody bronchoalveolar lavage fluid (D); cytology shows hemosiderin-laden macrophages (E). Chest computed tomography shows an irregular mass in the left central lung (F, asterisk).

A 56-year-old non-smoker man presented to the outpatient clinic with a chief complaint of dysgraphia. Magnetic resonance imaging of the brain revealed a 62-mm mass in the left occipital lobe, and brain biopsy revealed metastatic lung cancer harboring a rearrangement in the anaplastic lymphoma kinase (ALK) gene. Five days after initiating first-line chemotherapy with alectinib, the patient complained of a dry cough. Chest computed tomography showed bilateral scattered ground-glass opacities with thickening of the interlobular septa (Fig. 1A–C). Bronchoalveolar lavage of the right upper lobe retrieved a bloody fluid with a gradual increase in concentration (Fig. 1D), and cytology revealed hemosiderin-laden macrophages (Fig. 1E). We diagnosed the patient with alectinib-induced diffuse alveolar hemorrhage (DAH).¹ The patient's condition rapidly improved after discontinuation of alectinib and initiation of systemic steroid therapy. Lorlatinib was safely administered as the second-line chemotherapy without DAH. ALK-inhibitor induced DAH has not been previously reported. In this case, age was the only risk factor for interstitial lung disease associated with ALK inhibitors.² In central lung cancer, promptly performing a bronchoscopy aids the treatment strategy because airway obstruction due to bleeding can be critical (Fig. 1F). The patient provided informed consent for the publication this article.

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Conflict of interest

None.

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