Irreversible Imatinib-induced Pneumonitis following Long-term Imatinib Administration

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Picture 1. (A) Chest radiography 3 months after the initiation of imatinib revealed bilateral patchy, coarse reticular opacities. (B) Computed tomography scan confirmed diffuse patchy ground-glass opacities predominantly distributed along the bronchovascular bundle as well as right pleural effusion.

Interstitial pneumonitis related to imatinib (Glivec) shows various radiological patterns but usually improves after imatinib withdrawal or subsequent corticosteroid treatment (1-4). However, the results of re-administration of imatinib for long-term use have not previously been documented. A 70-year-old man with metastatic gastrointestinal stromal tumor (GIST) was treated with imatinib. He developed dyspnea on exertion after three months. His chest radiography and computed tomography revealed diffuse interstitial changes with peribronchovascular bundle pattern (Picture 1). Imatinib-induced pneumonitis was suspected. After discontinuation of imatinib, the pulmonary findings were nearly improved. However, imatinib was re-administered because his GIST again worsened. This time, imatinib was interrupted transiently while his GIST showed a marked regression, whereas it was restarted as the tumor grew larger. Four years later, he died of progression of GIST without fatal pneumonitis. However, his chest radiography and computed tomography revealed more progress in interstitial contractile changes with severe architectural distortion (Picture 2). This report widens the spectrum of imatinib-induced pneumonitis which clinicians should recognize following its long-term administration.
Picture 2. (A) A follow-up chest radiography 4 years after re-administration of imatinib revealed more progressive interstitial contractile changes, predominantly in the right lung field with pleural effusion. (B) Computed tomography scan confirmed a further increase in the peribronchovascular interstitial thickening with marked traction bronchiectasis and more prominent right pleural effusion.

References


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