An uncommon tomographic association: amiodarone pulmonary toxicity and adenocarcinoma

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A 73-year-old woman, a current smoker, presented with progressive dyspnea. She had a history of ventricular tachyarrhythmia treated with amiodarone. A chest X-ray demonstrated diffuse opacification of the left hemithorax. Chest CT showed left pleural effusion and a high-density collapsed lung containing a round hypodense mass (arrows). There was also small right pleural effusion and liver hyperdensity (the liver was denser than the heart; Figure 1). Percutaneous fine-needle aspiration biopsy of the mass revealed adenocarcinoma. The histopathological findings of the dense pulmonary parenchyma were compatible with amiodarone-induced pulmonary toxicity (APT). The patient died one month after the examination. Amiodarone is associated with a wide range of adverse effects, including APT.1-3 The diagnosis of APT can be suggested on the basis of a combination of clinical, radiological, and pathological findings, and is confirmed by improvement after discontinuation of amiodarone therapy.3 The high iodine content of the medication enables the detection of amiodarone deposits in the lung by CT as high-attenuation parenchymal opacities. The association of dense lung consolidations with high liver density is characteristic of amiodarone impregnation.2,3 In the case described here, the dense pulmonary parenchyma caused by amiodarone impregnation allowed the tomographic identification of the tumor.

REFERENCES


Figure 1. Axial (in A), coronal (in B), and sagittal (in C) chest CT scans showing left pleural effusion and a high-density collapsed lung containing a round hypodense mass (arrows). Note also small right pleural effusion and liver hyperdensity (the liver is denser than the heart).