

An uncommon tomographic association: amiodarone pulmonary toxicity and adenocarcinoma

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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).

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

- 1. Hudzik B, Polonski L. Amiodarone-induced pulmonary toxicity. CMAJ. 2012;184(15):E819. http://dx.doi.org/10.1503/cmaj.111763
- 2. Hochhegger B, Soares Souza A Jr, Zanetti G, Marchiori E. An enlarged heart with hyperdense consolidation. Neth J Med. 2013;71(6):317, 321.
- 3. Jarand J, Lee A, Leigh R. Amiodaronoma: an unusual form of amiodarone-induced pulmonary toxicity. CMAJ. 2007;176(10):1411-3. http://dx.doi.org/10.1503/cmaj.061102

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