

“Pseudocavitation” in Thymic Carcinoma During Treatment with Sunitinib

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A 45-year-old man with stage IVA thymic carcinoma was enrolled on a phase II study of sunitinib (50 mg daily)¹ 4 weeks after disease progression on first-line chemotherapy with cisplatin, doxorubicin, cyclophosphamide, and belinostat.² Molecular profiling of the tumor revealed only a p53 gene mutation (c-Kit was wild type).³

Baseline chest computed tomography, before sunitinib, showed a mediastinal mass with compression of the proximal right main pulmonary artery (Fig. 1A) and direct invasion of pericardium. Three weeks after initiation of sunitinib, the

patient reported increased left shoulder pain, cough, nausea, vomiting, and a palpable soft and fluctuating lesion measuring 2 cm in size overlying the sternum. A new computed tomography scan (Fig. 1B–D) showed an increase in the size of the mediastinal mass, which now included air (Fig. 1B–D, asterisk), air-fluid levels (Fig. 1B, D, arrow), dissection in the anterior chest wall with subcutaneous air (Fig. 1C, double arrow), and a large left pleural effusion (Fig. 1B–D). Sunitinib was discontinued, and a thoracentesis was performed to remove a liter of straw-colored fluid. Considering disease progression with

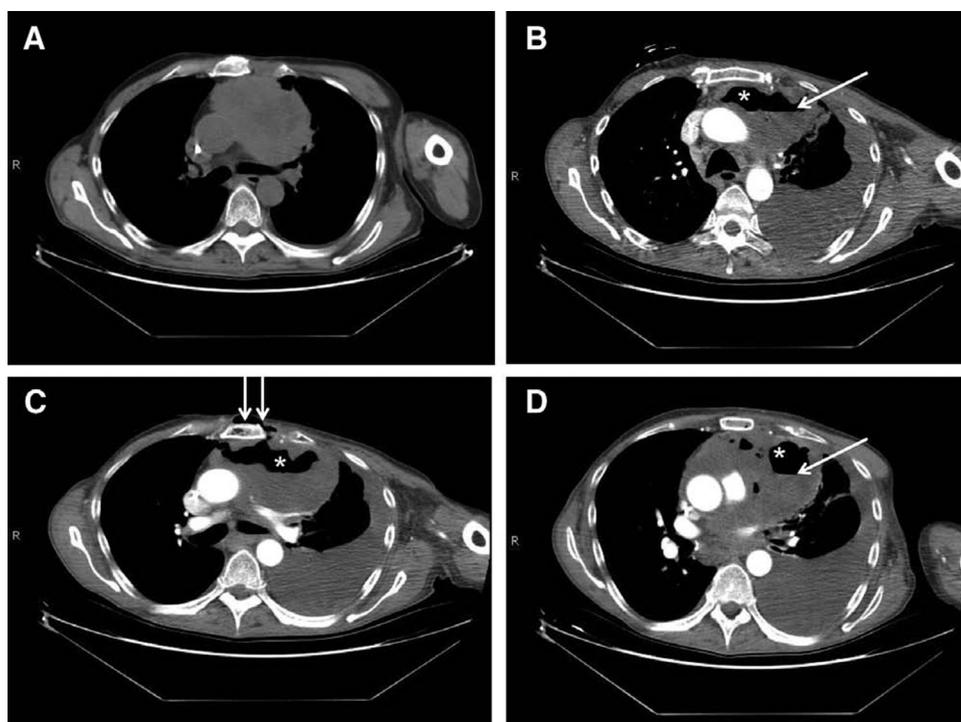


FIGURE 1. (A) Bulky mediastinal mass on CT scan, without contrast, before sunitinib; (B–D) mediastinal mass containing air (asterisk), air-fluid levels (arrow), with dissection in the anterior chest wall and subcutaneous air (double arrow), and large left pleural effusion after 3 weeks of sunitinib. CT, computed tomography.

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tumor necrosis and superimposed infection with the possibility of bronchocutaneous fistula, antibiotic therapy was started. Subsequently, the patient's clinical condition deteriorated rapidly with development of right ventricular heart failure, and he died 2 weeks later. The autopsy revealed massive neoplastic infiltration of the heart and great vessels, including the pulmonary artery and left lung, with abundant tumor necrosis, most likely related to rapid progression of disease rather than anti-angiogenesis effects of sunitinib. This represents an unusual finding in a patient with an aggressive thymic carcinoma.

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