Spontaneous haemopericardium with subacute cardiac tamponade in a patient with lung cancer receiving coumadin

A 74-year-old woman with a history of stage IIIb non-small cell lung carcinoma undergoing concomitant chemoradiation therapy presented to the emergency centre with a 2-day history of dyspnea and chest tightness. The patient had a pulmonary embolism 1 month earlier, because of which she was receiving a therapeutic dosage of coumadin. On physical examination, she was afebrile, with a pulse rate of 100 beats per minute and blood pressure of 108/65 mmHg. Chest auscultation revealed regular but distant heart sounds and no murmurs or gallops. The jugular venous pressure was 15 cm H₂O. The patient had fine crackles bilaterally with occasional rhonchi. Laboratory values were as follows: haemoglobin 9.1 g/dl; platelet count 238 x 10⁶/dl; prothrombin time 17.6 s. Electrocardiography showed sinus rhythm and diffuse ST segment elevation. Chest radiograph revealed bilateral pleural effusions and a marked increase in the heart size (Panel A) compared to the size on a chest radiograph obtained 10 days earlier (Panel B). This cardiomegaly was judged to be consistent with acute onset pericardial effusion. Emergent transthoracic echocardiography revealed a large, loculated pericardial effusion, with normal left ventricular wall motion but a right atrial systolic collapse suggestive of tamponade. Given the loculation and the posteroinferior location of the fluid, echo-guided pericardiocentesis was judged risky, and instead the patient underwent a pericardial window procedure under general anaesthesia and drainage of 750 cc of haemorrhagic fluid. The patient’s lung carcinoma caused the pericardial effusion, which turned haemorrhagic because of the coumadin, resulting in tamponade. Limited case–control studies revealed no evidence to support that anticoagulation increases the risk of cardiac tamponade in patients with known malignancy-related pericardial effusions.¹

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Reference