Abstract: **P588**

**Cardiac tamponade as the first presentation of a lung cancer**

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**Topic(s):**
Pericardial Effusion

**Citation:**

**Introduction:**
Pericardial effusion can be caused by a wide array of aetiologies. Those causes of effusion with a high incidence of progression to tamponade include bacterial, fungal, HIV-associated infections, bleeding and neoplastic involvement. About 20% of large, symptomatic effusions without an obvious ethology following routine evaluation constitute the initial presentation of a cancer.

**Clinical case:**
The authors present a clinical case of a 56 year-old healthy male patient. Former smoker, with no other relevant personal background neither chronic medication. He was admitted to our emergency room due to symptoms of fatigue for progressive smaller efforts which started two weeks before. At admission: patient was alert, with a normal respiratory rate and blood pressure (118/63mmHg), tachycardia (120/min), standing out the presence of paradoxical radial pulse and jugular engorgement. Electrocardiogram in sinus rhythm, 120/min, low voltage on members leads. Summary transthoracic echocardiogram revealed a circumferential pericardial effusion, 22mm of largest dimension in subcostal incidence, partial right atrium and ventricle collapse at diastole, 30% of transmitral flow variation, dilatated inferior vena cava and without respiratory variation. The diagnosis of cardiac tamponade of aetiology to clarify was admitted and an urgent pericardiocentesis was performed. It was drained 500ml of a serohematic liquid, which analysis revealed to be an exudate, with no presence of neoplastic cells. On the next day, due to elevated D-dimer a pulmonary computed angiotomography was performed revealing a pulmonary embolism at the subsegmental and segmental branches of left pulmonary artery and some focus of parenchyma densification with nodular morphology at the right upper lobe (RUL) suggesting atipia. A bronchofibroscopy was performed revealing direct signs of neoplasm of the RUL, whose biopsy revealed to be a moderately differentiated adenocarcinoma. After pericardiocentesis, a daily echocardiographic evaluation was performed with evidence of progressive pericardial effusion reconstitution and one week after admission there was signs of pre-tamponade so a new pericardiocentesis was performed, with success. The patient initiated chemotherapy with carboplatin plus pemetrexed, with no pericardial effusion recurrence.

**Conclusion:**
Malignant pericardial effusion is a common and serious manifestation in malignancies. In some cases, pericardial effusion may be the first manifestation of the disease, and that is why malignancy must be excluded in every case of an acute pericardial disease with cardiac tamponade at presentation, rapidly increasing pericardial effusion and an incessant or recurrent course.
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