Constrictive pericarditis as the first manifestation of unknown neoplasia

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BACKGROUND

The metastatic involvement of the heart is much more frequent than the primary one and it is generally underestimated.

Lung cancer is the most common primary tumor in cardiac metastatic disease.

CLINICAL CASE

57-year-old male patient with fever, asthenia, anorexia, progressive dyspnea, orthopnea and increased edema in lower limbs in the last two weeks.

Personal medical history: right squamous oropharyngeal carcinoma (T3N2) treated with radiotherapy. Submucosal sigmoid adenocarcinoma treated with right hemicolectomy (pT1N0). Follow-up in Oncology: disease-free.

Physical examination: fever, low blood pressure, jugular vein enlargement, hepatojugular reflux, hepatomegaly and lower limbs edema.

The medical team requested the following image tests:

- Chest radiography: cavitated nodule in lower left pulmonary lobe and cardiomegaly.
- Transthoracic echocardiography: diffuse pericardial thickening with slight effusion that causes signs of pericardial constriction, marked inferior vena cava and suprahepatic veins dilatation.
- Cardiac magnetic resonance: acute-subacute pericarditis with constrictive physiology.
- PET-CT: intense uptake in pericardial thickening with little amount of effusion that can't differentiate between inflammatory/infectious or tumor process

With these findings, we decided to look for the diagnosis by making biopsies of the pericardium and the left lower pulmonary lobe under general anesthesia

Cardiac surgeons performed pericardial subxiphoid biopsy resulting in squamous carcinoma in pathological anatomy. Pulmonary biopsy could not be performed due to the patient's clinical status.

Surgical and oncological treatment were dismissed. Comfort measures were prioritized. The patient died on the third postoperative day.

LEARNING POINTS

- Pericardial constriction as primary manifestation of a tumoral process is very infrequent
- Lung carcinoma is the primary tumor that most often causes metastasis in pericardium
- Generally the cardiac involvement goes unnoticed because the symptoms of the primary tumor prevail.