

Clinical Image

Pericardial Effusion as First Manifestation of NSCLC

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A 57-year-old man was admitted to the emergency department with progressive dyspnea, hoarseness and cough for four weeks. Past medical history included loss of weight (10 kg within 2-3 months) and nicotine consumption, collectively 40 pack years. Physical examination showed a tachycardic (115/min), normotensive, cachectic and anxious patient using accessory respiratory muscles and signs of superior cava syndrome. Chest radiograph revealed immense cardiomegaly, pleural effusions on both sides and a nodular compaction in the right midfield (Figure 1). Echocardiography detected a 'swinging heart' with massive pericardial effusion in

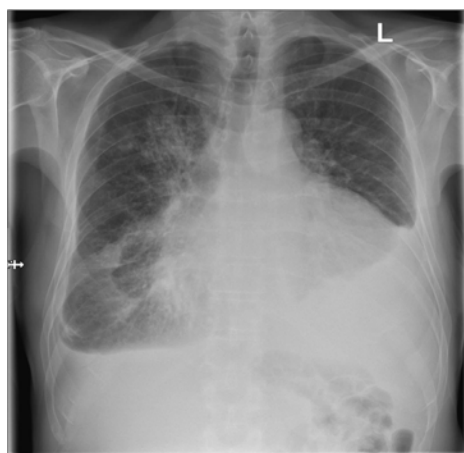


Figure 1: Chest radiograph showing predominantly left-sided pleural effusion, local dysteactasis, global cardiomegaly and a 2.4 cm nodular compaction in the right medial lobe.



Figure 2: Transthoracic echocardiography showing extensive pericardial effusion in transition to a cardiac tamponade with constriction of right atrium and ventricle.

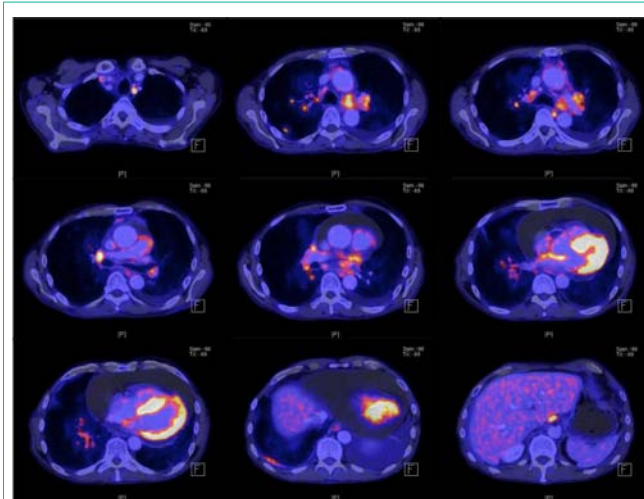


Figure 3: PET-CT detecting extensive metabolically active diffusely spreading tumor manifestations with the left hilar primary tumor, lymphangiosis carcinomatosa on both sides, pleural and pericardial involvement, and multiple lymph node metastases in the mediastinum, both sides of the hilum, and in the cervical and abdominal areas. Tumor stage was identified to be T4N3M1a. Furthermore, pulmonary embolism and progressive, severe pericardial effusion was found.

transition to a cardiac tamponade (Figure 2), rarely described before in such clinical context [1,2]. Pericardial puncture revealed 2.5l of exudates; histological without malignancy. Bronchoscopy was performed, showing mucosal carcinosis, especially at the right carina of the superior lobe. Cryobiopsy uncovered a high grade bronchial adenocarcinoma without relevant ALK1-EML4-Inversion and wild type of EGFR. Subsequent PET-computerized tomography showed an advanced tumor stage (Figure 3). Due to the pericardial effusion with even dismal prognosis [3,4]. Palliative chemotherapy with cisplatin and pemetrexed was started.

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