Annals of Hematology & Oncology

Open Access

Austin Publishing Group

Clinical Image

Pericardial Effusion as First Manifestation of NSCLC

Werner JO[1#], Stickel JS[1#*], Droppa M[2], Krumm P[3], Müller MR[1], Kanz L[1] and Kreth F[4]

[1]Department of Medical Oncology, Hematology, Immunology, Rheumatology and Pulmonology, University Hospital of Tuebingen, Germany

[2]Department of Cardiology and Cardiovascular Medicine, University Hospital of Tuebingen, Germany

[3]Department of Diagnostic and Interventional Radiology, University Hospital of Tuebingen, Germany

[4]Department of Gastroenterology, Hepatology, Infectious Diseases and Translational Gastrointestinal Oncology, University Hospital of Tuebingen, Germany

[#]These Authors Contribute Equally to this Work

***Corresponding author:** Stickel JS, Department of Medical Oncology, Hematology, Immunology, Rheumatology and Pulmonology, Medical Center II, South West German Comprehensive Cancer Center, University Hospital of Tuebingen, Ottfried-Müller-Straße 10, 72076 Tuebingen, Germany, Tel: +49-7071/29-82779; Email: juliane.stickel@med.uni-tuebingen.de

Received: May 01, 2015; **Accepted:** May 11, 2015; **Published:** May 11, 2015

Clinical Image

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 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.

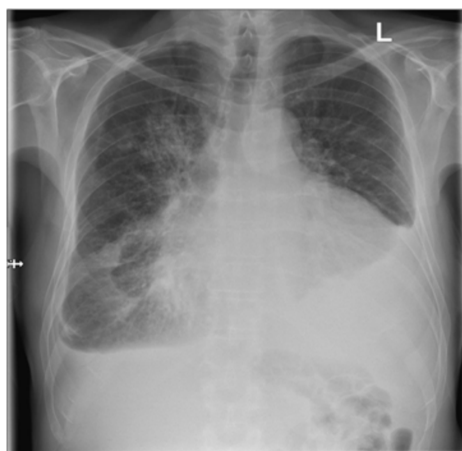

Figure 1: Chest radiograph showing predominantly left-sided pleural effusion, local dystelectasis, global cardiomegaly and a 2.4 cm nodular compaction in the right medial lobe.

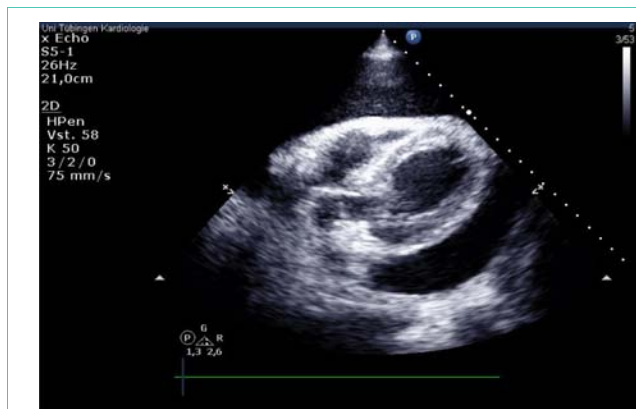

Figure 2: Transthoracic echocardiography showing extensive pericardial effusion in transition to a cardiac tamponade with constriction of right atrium and ventricle.

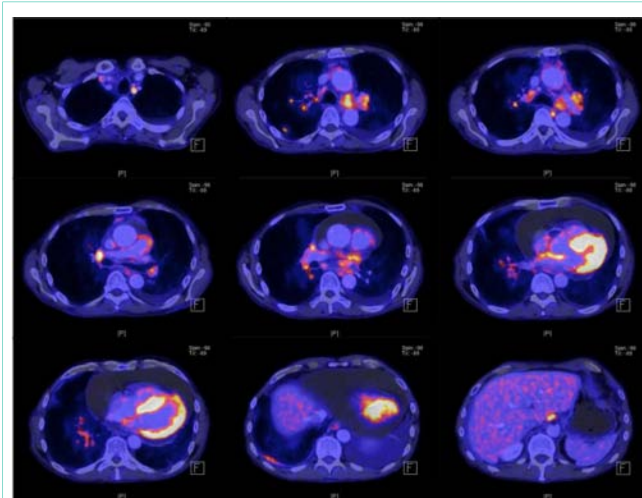

Figure 3: PET-CT detecting extensive metabolically active diffusely spreading tumor manifestations with the left hilar primary tumor, lymphangiosis carcinomatosa on both sides, pleural and pericardial involvement, and multiple lymph node metastases in the mediastinum, both sides of the hilum, and in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

Stickel et al. © All rights reserved

Citation: Werner JO, Stickel JS, Droppa M, Krumm P, Müller MR, et al. Pericardial Effusion as First Manifestation of NSCLC. Ann Hematol Oncol. 2015;2(5): 1037.

References

1. Thomas C, Lane K, Cecconi M. Pulmonary embolism with haemorrhagic pericardial effusion and tamponade: a clinical dilemma. BMJ Case Rep. 2014.

2. Kocher F, Fiegl M, Mian M, Hilbe W. Cardiovascular Comorbidities and Events in NSCLC: Often Underestimated but Worth Considering. Clin Lung Cancer. 2014.

3. Gornik HL, Gerhard-Herman M, Beckman JA. Abnormal cytology predicts poor prognosis in cancer patients with pericardial effusion. Journal of clinical oncology: official journal of the American Society of Clinical Oncology. 2005; 23: 5211-5216.

4. Tamura T, Kurishima K, Nakazawa K, Kagohashi K, Ishikawa H, Satoh H, et al. Specific organ metastases and survival in metastatic non-small-cell lung cancer. Mol Clin Oncol. 2015; 3: 217-221.

Ann Hematol Oncol - Volume 2 Issue 5 - 2015
ISSN : 2375-7965 | www.austinpublishinggroup.com
Stickel et al. © All rights reserved

Citation: Werner JO, Stickel JS, Droppa M, Krumm P, Müller MR, et al. Pericardial Effusion as First Manifestation of NSCLC. Ann Hematol Oncol. 2015;2(5): 1037.