Letter to Editor

Squamous Cell Lung Cancer Presenting with Initial Rare Paraneoplastic Hematological Findings

Nadir Paraneoplastik Hematolojik Bulgularla Seyreden Skuamöz Hücreli Akciğer Kanseri

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To the editor,

A hematologic paraneoplastic syndrome (PNS) known as paraneoplastic leukemoid reaction (PLR) has been associated with several solid tumors and is classified in the literature as having more than 50,000 leukocytes/mm^3 [1]. Although rare, solid tumor cases presenting with eosinophilia and thrombocytosis have been reported in the literature [2, 3]. We report a 71-year-old male patient, a former smoker (41 pack-years) diagnosed with stage IV lung cancer. He admitted to the endocrinology outpatient clinic with fatigue and dry mouth. The patient referred to the hematology outpatient clinic due to leukocytosis (27.950 mm^3), eosinophilia (4320 mm^3), thrombocytosis (742.000 mm^3), and anemia (11 g/dL) in laboratory tests. Due to the patient's clinical and laboratory findings, bone marrow aspiration and biopsy were performed. Bone marrow aspiration revealed bone marrow metastasis and hypereosinophilia depicted in Figure 1. Because of the presence of metastases in the bone marrow aspiration the patient underwent computed tomography (CT) of the neck, chest, abdomen and pelvis with intravenous contrast solution. In the thorax CT of the patient, there was a pleural effusion measured 23 mm in the thickest part of the right hemithorax. A mass atelectasis complex was observed in the lower lobe of the right lung with a size of 95x60 mm and an invasive appearance in the posterior mediastinum. The right lower lobe bronchus was completely obliterated. (Figure 2). Sampling with thoracentesis and bronchoscopic biopsy performed on the patient. He was diagnosed with Non-Small Cell Carcinoma and squamous Cell Carcinoma lung cancer (Figure 3). PLR is an explanation for hyperleukocytosis in solid tumors. However, it is still an excluding diagnostic paraneoplastic hematological syndromes, which are usually asymptomatic and are often seen either at diagnosis or during disease progression, typically in advanced disease [4]. It is a possible indicator of disease progression and therapy response since it is known to be linked to poor prognosis and clinical outcomes [4]. As a result, it should be kept in mind that patients presenting with leukocytosis, thrombocytosis, and eosinophilia may have paraneoplastic findings due not only to hematological malignancies but also to solid tumors.

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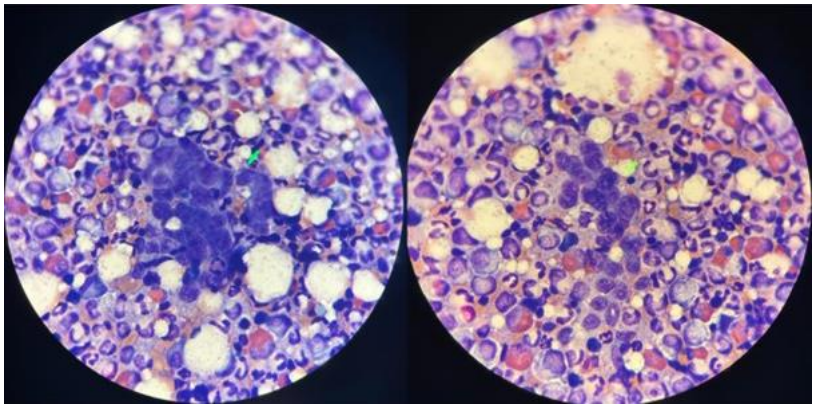

Figure 1. Squamous carcinoma cells clustered together with hematopoietic precursor cells, bone marrow aspiration

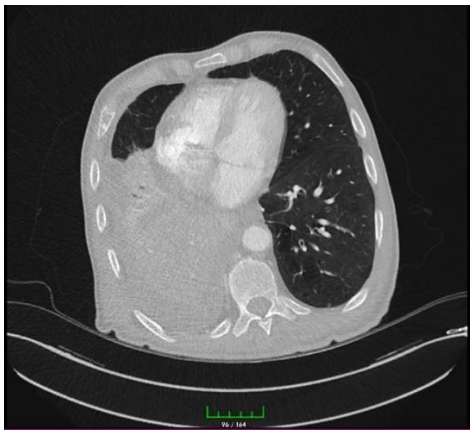

Figure 2. A mass atelectasis complex in the lower lobe of the right lung with a size of 95x60 mm

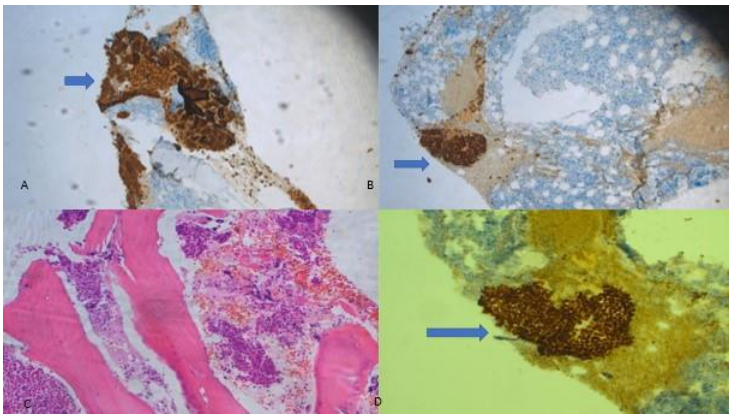

Figure 3. A-B: Tumor infiltration, immunohistochemical staining of pan-cytokeratin 10x10, C: Tumor infiltration on the upper side of the hematoxylin-eosin stained slide 10x10, D: P40 immunohistochemical staining 20x10

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