OLGU SUNUMU CASE REPORT

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BRONCHIAL CARCINOID TUMOR MIMICKING PULMONARY ARTERY ANEURYSM

PULMONER ARTER ANEVRİZMASINI TAKLİT EDEN BRONŞİAL KARSİNOİD TÜMÖR

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Öz

Histopatolojik olarak APUDomas olarak da adlandırılan nöroendokrin tümör geniş spektrumlu bir hastalıktır. Vücudun herhangi bir yerindeki embriyonik nöral krest dokusundan köken alan heterojen bir malignite grubudur. Akciğerdeki Kulchitsky hücrelerinden kaynaklanır ve düşük dereceden yüksek dereceye kadar değişen bir malignite grubudur.

Anahtar Kelimeler: İnsidental, Nadir, Taklitçi

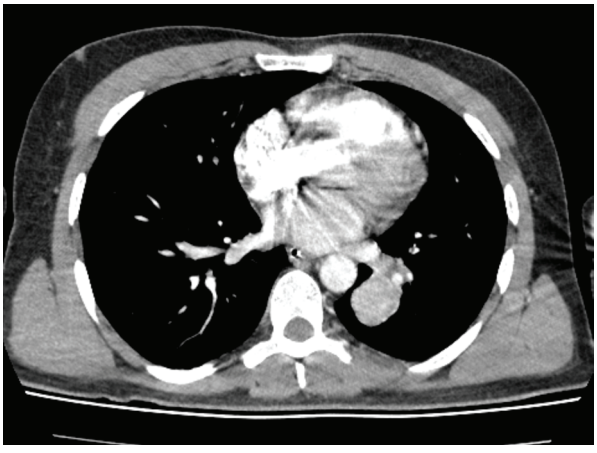
Abstract

Neuroendocrine tumor, also called APUDomas histopathologically, is a broad-spectrum disease. It is a heterogeneous group of malignancies derived from embryonic neural crest tissue from any part of the body. It originates from Kulchitsky cells in the lung and is a group of malignancies ranging from low grade to high grade.

Keywords: Imitator, Incidental, Rare

Case Report

Computed tomography (CT) of a 28-year-old male patient who presented to the emergency department with massive hemoptysis shows a well-circumscribed nodular lesion associated with the left hilum (Figure 1a). Also, amorphous opacity with irregular surface is observed in the left main bronchus (Figure 1b). Since imaging was obtained after massive hemoptysis, we first interpreted the current appearance as a blood clot. Dynamic contrast-enhanced magnetic resonance imaging (dMRI) was obtained, and the lesion was enhanced in the arterial phase up to the aorta (Figure 1c). MRI and CT images of the lesion in



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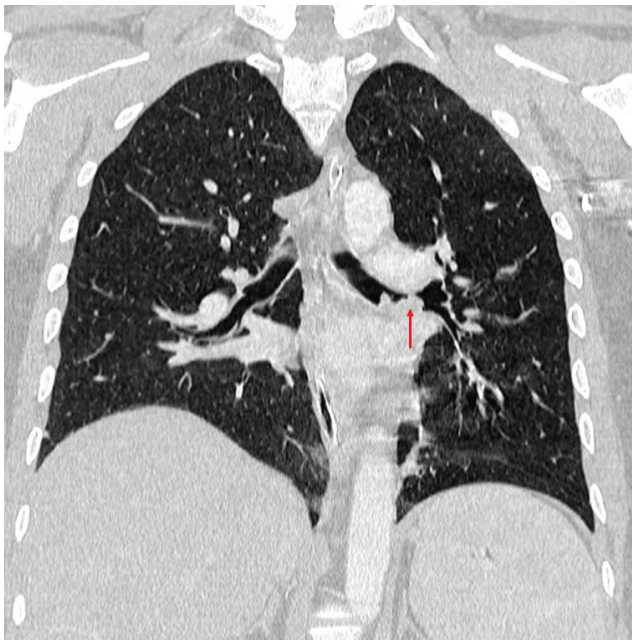

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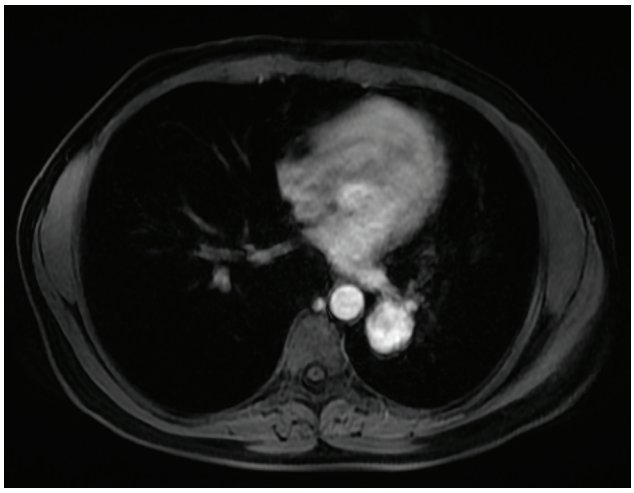

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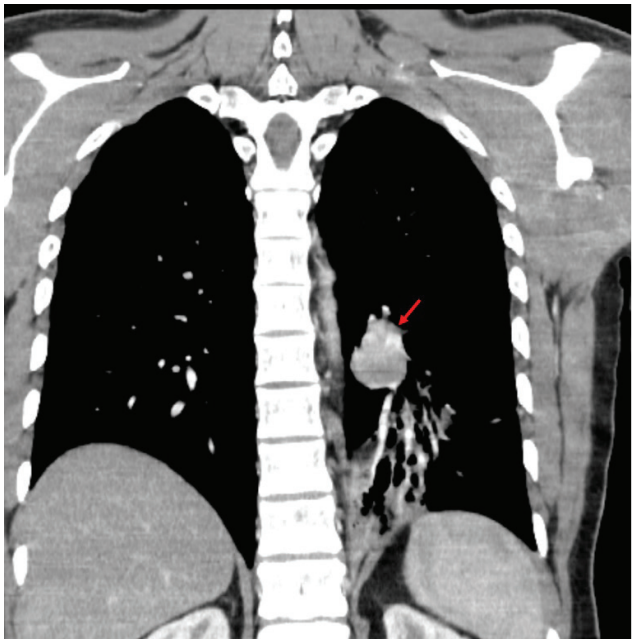

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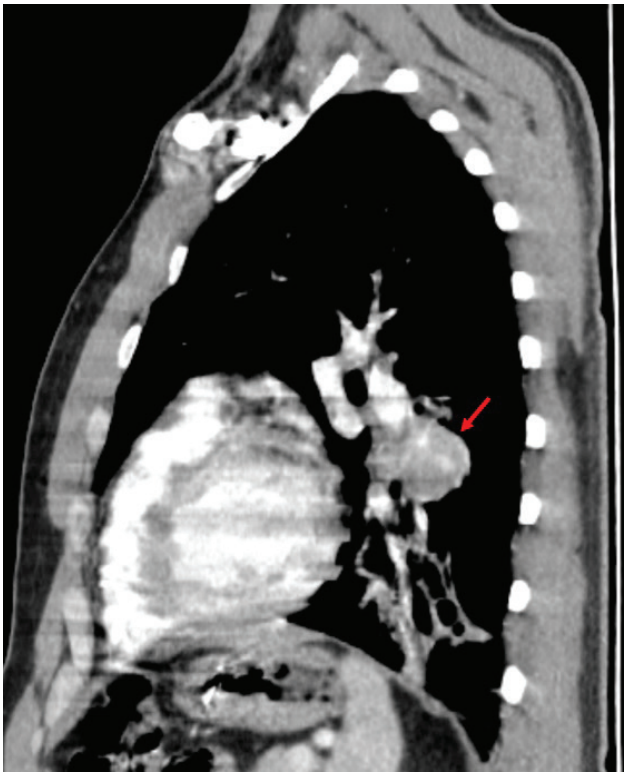

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different planes are shown in Figures 1d, 1e and 1f. In this case, we thought that the lesion might be an aneurysm. The patient underwent bronchoscopy and after histopathological evaluation, the pathology of the lesion was reported as bronchial carcinoid tumor.

Discussion

APUDomas, also known as neuroendocrine tumors, when examined histopathologically, manifest as a wide-ranging disease. Emerging from embryonic neural crest tissue in various body locations, these malignancies originate in the Kulchitsky cells of the lungs and span a spectrum from low-grade to high-grade. Bronchial carcinoid tumor is a segmental or large bronchial structure associated tumor in the neuroendocrine tumor group. It is observed between the 3rd and 7th decades and the average age of is 45 (1). Most of these tumors originate from the tracheobronchial tree and rarely arise from the

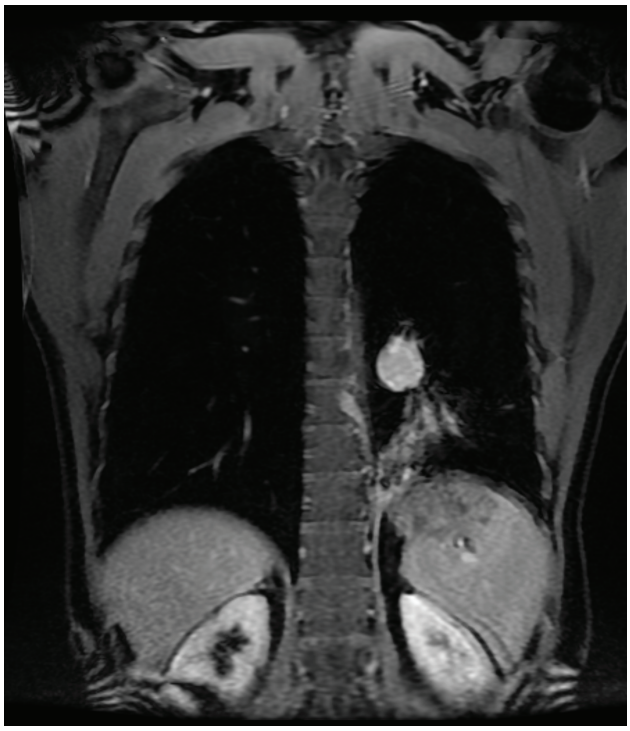

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Figure 1
a) Contrast-enhanced CT, mediastinal window. Well-circumscribed ovoid lesion in the left inferior hilar region. b) Coronal parenchyma window, CT. Irregular, polypoid-shaped appearance in the left main bronchus (red arrow). c) Contrast-enhanced MRI. The lesion is intensely contrasting like the arterial structure. d) Coronal CT image. The lesion is shown with a red arrow. e) Sagital CT image. The lesion is shown with a red arrow. f) Coronal Contrast-enhanced MRI. The lesion is intensely contrasting like the arterial structure.

trachea. Radiologically, it is observed as a centrally located, round or oval shaped, smooth contour, 2-5 cm hilar or perihilar mass. In contrast series, it is intensely and homogeneously enhanced due to high vascularization. Eccentric calcification may be observed. Pulmonary artery aneurysm, which defines focal dilatation of pulmonary artery, is a rarely encountered pathology. There is an extensive list of differential diagnoses of pulmonary artery aneurysm.

Bronchial carcinoid tumor, which is a centrally located neoplasia, presents as bronchial obstruction findings (such as atelectasis, pneumonia, bronchiectasis) related to its localization. These lesions are associated with multiple endocrine neoplasia type 1 and cushing syndrome (2). On contrast-enhanced cross-sectional examination, these lesions are intensely and homogeneously enhanced and can often be mistaken for aneurysms radiologically. In our case, we confused it with pulmonary artery aneurysm due to close neighborhood. Bronchial carcinoids are often associated with the airway, as in our case.

Conflict of Interest Statement
The authors have no conflicts of interest to declare.

Consent to Participate and Publish
Written informed consent to participate and publish was obtained from the participant included in the study.

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Availability of Data and Materials
Authors can confirm that all relevant data are included in the article and/or its supplementary information files

Authors Contributions
All tasks done by H.A.K.

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