Abstract
Alveolar adenoma is one of the rarely seen benign tumors of the lung, to date, one or two series have been reported. In this study, four rare alveolar adenoma cases were presented, thereby contributing to the existing scarce data.

KEYWORDS: Thoracic surgery, lung pathology
INTRODUCTION

Alveolar adenoma is one of the rare benign tumors of the lung. It was first described in a six case studies by Yousem and Hochholzer in 1986 [1]. Burke et al. [2] evaluated the clinical and pathological findings of alveolar adenomas with a 17 maturation series. It is usually found in middle-aged women and shows asymptomatic findings in chest radiographs. Overall less than 1% of all lung tumors have been reported to be detected [1-3]. Here, we present four cases (one male and three females) of alveolar adenoma. The patients provided written informed consent for publication.

CASE PRESENTATIONS

Case 1

A 36-year-old male patient presented to our clinic with a complaint of chest pain. There was no obvious feature in the physical examination and in the patient's history. The blood pressure was 120/80 mmHg, pulse rate was 95/min, body temperature was 36.5°C, and respiration rate was 26/min. The laboratory parameters are within normal limits. A thoracic computed tomography (CT) scan revealed a 26-mm nodule without calcification in the left lower lobe (Figure 1). A fiberoptic bronchoscopy (FOB) examination showed no pathology. A positron emission CT (PET-CT) revealed a 26-mm nodule (SUV-max 2.8) in the left lower lobe of the lung. A diagnosis was not made despite transthoracic fine needle aspiration. Agglutinin tests for hydatid cysts were negative. The forced vital capacity) in the pulmonary function test was 2.8 L, 98%, forced expiratory volume in 1 s was 2.4 L, 93%. The lesion was reported as benign in the thoracotomy-derived frozen section. The pathologic diagnosis was alveolar adenoma (Figure 2). No pathology was found in the 34-month follow-up of the patient.

Case 2

A 51-year-old woman was admitted to our clinic with shortness of breath. A posterior-anterior-posterior chest X-ray showed uniformly increased density of approximately 2 cm in the right hemithorax subregions. In the thoracic CT, a solitary pulmonary nodule with a diameter of 1.8 cm was localized paravertebrally in the posterior segment of the right upper lobe (Figure 3). The bronchial system was routinely evaluated in the FOB examination. Thoracotomy was performed due to a family history of hydatid cyst. When the lesion was diagnosed as frozen cutaneous benign, thoracotomy was performed through wedge resection. The pathological diagnosis was alveolar adenoma. No pathology was found in the 15-year follow-up of the patient.

Case 3

A 38-year-old female patient presented with thoracic hemoptysis and pain. Thoracic CT revealed a 1.3 cm diameter pulmonary nodule in the anterior segment of the right upper lobe. No pathology was detected in the FOB. Thoracotomy was performed because of hemoptysis. The lesion was diagnosed as
This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Derdiyok O, Kavas M, Öztürk A, et al. Rare Lung Tumors of Alveolar Adenoma: Four Case Reports. Turk Thorac J 2018. DOI: 10.5152/TurkThoracJ.2018.18015

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Informed Consent: Written informed consent was obtained from patients who participated in this study.

Peer-review: Externally peer-reviewed.


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

Financial Disclosure: The authors declared that this study has received no financial support.

REFERENCES


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Figure 1. Case 1 - CT was performed on the left lower lobe with a smoothly defined, 26 mm sized nodule without calcification.
Figure 2. a, b. (a) Histopathological picture: Pleomorphic adenoma (hematoxylin and eosin stain, 100X) consisting of fibrous background placental epithelium elements with no nuclear or cellular atypical findings (b) lumen, periodic acid schiff (PAS) + eosinophilic secretions (PAS, 400X)
Figure 3. a, b. Case 2. (a) Rare limited density increase of about 2 cm in the right hemithorax in the lower zone of the posterior anterior lungs (b) Thoracic CT revealed a solitary pulmonary nodule with 1.8 cm in diameter localized in the right upper lobe posterior segment.