CENTRALLY LOCALISED PULMONARY PAPILLARY ADENOMA

SANTRAL YERLEŞİMLİ PULMONER PAPİLLER ADENOMA

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ÖZET

Pulmoner papiller adenom oldukça nadir karşılaşılan bir tümördür. Malign potansiyeli tam olarak anlaşılamamış olsa da benign kabul edilmektedir. Sıklıkla akciğer grafisinde tesadüfen saptanan periferik yerleşimli lezyonlar olarak tespit edilmektedirler. Hastamızın akciğer grafisinde sağ tarafta iyi sınırlı yuvarlak bir kitle lezyonu görüldü. Kitle lezyonu için sağ torakotomi ile enukleasyon ve kapitonaj ameliyatı yapıldı. Patolojik inceleme sonucu pulmoner papiller adenoma olarak rapor edildi. Literatürde günümüze kadar yirmi üç hasta rapor edilmiş olgu bulunmaktadır. Bildirilen olgularda en büyük lezyon çapı 3 cm iken olgumuzda 4 cm çapında idi. Postoperatif olarak pulmoner papiller adenom tanısı konulan hastamız nadir olması ve santral yerleşimli olması nedeniyle sunulmuştur.

SUMMARY

Pulmonary papillary adenoma is an extremely rare tumor and considered benign although its malignant potential is not completely understood. It is usually detected incidentally as peripheral lesions in chest radiography. A round mass lesion with regular margins was observed on the right side of our patient's chest radiography. The mass was enucleated and capitonnage was performed via right thoracotomy. Pathological examination was reported as papillary adenoma. Twenty three cases have been reported in the literature. While the largest diameter of lesions had been 3 cm in reported cases, the diameter of our patient's lesion was 4 cm. We present our postoperatively diagnosed papillary adenoma case due to its rarity and central location.

INTRODUCTION

Pulmonary papillary adenoma is an extremely rare neoplasm that usually localized in the peripheral lung (1). Spencer et al. described two cases for the first time in 1980 (2). Up to date, Twenty three cases have been reported in the literature (3). They are generally small in size and the largest reported one reached 3 cm in diameter (4,5). It originates from Type II pneumocytes (4-6). Although it was considered as benign, its malignant potential is not known exactly (1,6). The case presented here differs from previous cases by its large size and its central location. We present our case due to the features of being rare, in a larger size, and centrally localised.

CASE

21-year-old male patient was admitted for a medical report. Chest X-ray revealed a well-circumscribed round mass in the right (Figure 1). The patient did not have any symptoms and signs. Laboratory tests, including complete blood count and routine biochemical tests were within normal limits. Computed tomography of the thorax showed a centrally localized mass reaching 4 cm in the largest diameter in the upper lobe (Figure2). Endobronchial lesion was not detected in bronchoscopic examination. A right thoracotomy was performed. Solid mass was enucleated and capitonnage was performed.

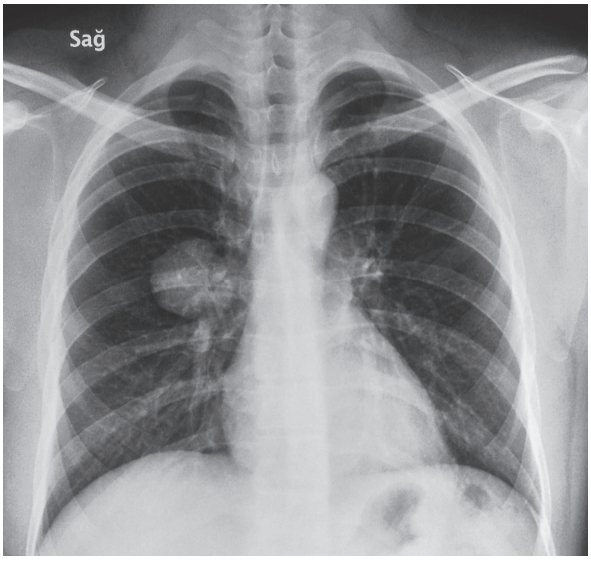

Figure 1. Chest X-ray revealing a well-circumscribed round mass in the right.

Gross examination revealed an uncapsulated but well-circumscribed rubbery tumor with a grayish white cut surface measuring 4 cm in the greatest diameter (Figure 3). In microscopic evaluation, the tumor was predominantly composed of typical papillary structures with fibrovasculary cores lined by single layer of uniform cuboidal cells with scanty eosinophilic cytoplasm and basally located oval nuclei (Figure 4). The tumor cells did not exhibit mitotic activity. Based on these findings, pulmonary papillary adenoma diagnosis was made on histopathological evaluation. Any complication was not observed and the patient was discharged on the postoperative seventh day. Further treatment except outpatient clinic control was not suggested.

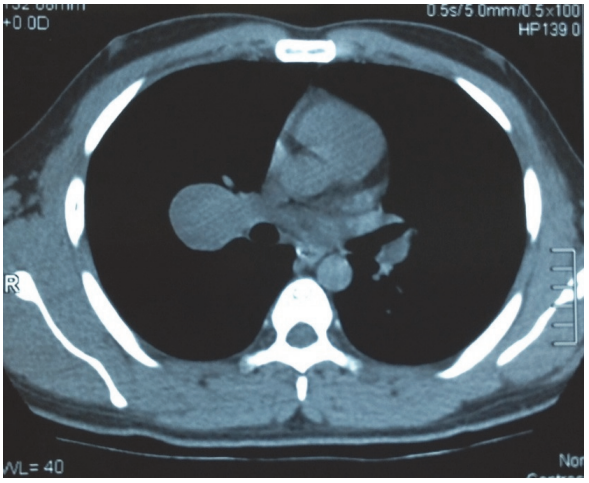

Figure 2. Computed tomography of the thorax showing a centrally localized mass reaching 4 cm in largest diameter in the upper lobe.

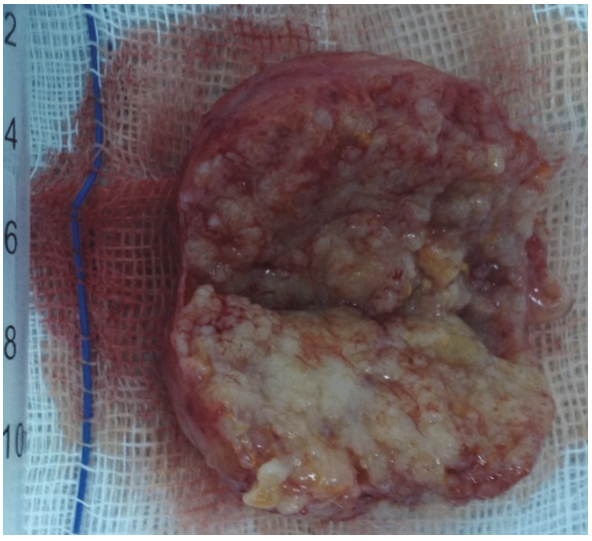

Figure 3. Gross examination revealing an uncapsulated but well-circumscribed rubbery tumor with a grayish white cut surface measuring 4 cm in greatest diameter.

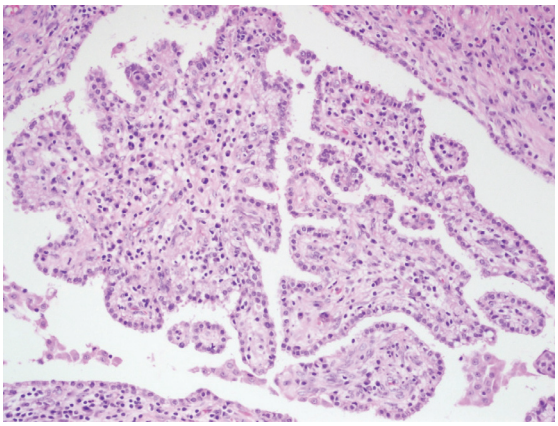

Figure 4. Tumor was composed of papillary projections lined by a single layer of cuboidal cells. The epithelial lining does not exhibit cellulary atypia or mitotic activity (H&E X200).

DISCUSSION

Pulmonary papillary adenoma is very rare (1). To date, 23 cases have been reported (3). The largest of these cases was 3 cm in diameter (5). Our case was 4 cm in diameter and one of the largest tumors ever reported. Pulmonary papillary adenoma can be seen at any age, but more often in men(1). Patients of pulmonary papillary adenoma are usually asymptomatic and the lesions are diagnosed incidentally by chest radiography. The tumors usually are detected as a single small peripheral lesion. A few cases have been described located centrally such as our case (1,5). Only one has been reported in patients with multiple lesions (2).

Papillary adenoma is considered to be benign, but some publications have shown microscopic invasion. Metastasis or recurrence has not been reported. This may be the result of having a benign tumor. Another reason may be the implementation of a radical surgical treatments such as lobectomy and lymph node dissection (7).

Although it is believed that the tumors originated from type II pneumocytes or Clara cells, recent studies have revealed that papillary adenoma differentiated from II pneumocytes. Alveolar adenoma, sclerosing hemangiomas and well-differentiated adenocarcinoma should be considered in the differential diagnosis (4).

Bronchiolo-alveolar carcinoma is a malignant tumour and it is distinguished from papiller adenoma by the presence of atypia, mitotic cells and necrosis. Although sclerosing haemangioma has similar papillary structures, it has solid and hemoragic areas (1).

Many types of resection such as wedge resection or lobectomy have been performed for papillary adenoma (1-6). The tumor is dissected from lung parenchyma easily due to its well-circumscribed nature. Therefore, enucluation can be done easily. Enucleation is a proper surgical treatment option in order to protect the maximal lung parenchyma. Enucleation was performed and our patient was followed up for 3 months.

Consequently, our case is a centrally localised pulmonary papillary adenoma although the most cases presented are peripheral in the literature. It should be considered in the differential diagnosis of solid pulmonary masses. Its recommended treatment is surgically removal of the mass due to lack of knowledge of its malignant behavior.

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