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Alveolar adenoma of lung: A case report

KEYWORDS: Lung Neoplasms; Adenoma; Pulmonary Alveoli

ABSTRACT

Alveolar adenoma is a rare pulmonary disease characterized by proliferative alveolar epithelium (pneumocyte Type II) and septal mesenchyma (1,2). A case of periphery alveolar adenoma, radiologically followed up through 8 years, has been presented. The cystic tumor cavities were final histopathological results and filled with light acidophilic homogenous material, surrounded with cubic cells, partly light colored vacuolised cytoplasm. Stroma was fibrovascular, mostly moderated. Diagnosis was immunohistochemically determined. It is clinically important, as can imitate different specific lung diseases, focal nonspecific inflammations, benign and primary and secondary malignant tumors. For getting a precise diagnosis beside routine HE exams, it is necessary to use immunohistochemical analysis to differ alveolar adenoma from already mentioned pathological lung processes.

INTRODUCTION

Alveolar adenoma is a rare pulmonary disease characterized by proliferative alveolar epithelial (pneumocyte Type II) and septal mesenchyma. It is quite an asymptomatic disease and in most cases is diagnosed with a random RTG lung examination (3). This disease mostly strikes older population. It is usually solitary, peripheral change (4) 10 to 50 mm in diameter. First cases were described on 1986. (5,6) by Yousem and Hochholzer.

CASE REPORT

A female patient 64 years old, with cardiac problems and diabetes for many years; lung and heart RTG examination have showed in 1995; a well marked, solitary change in the upper segment of left lung. It was not possible to approach the change bronchoscopically. The CT examination has confirmed the existence of a solitary, well marked shadow in the left lung with maximal diameter of 22.7 mm. Radiological diagnosis suggested it was a benign

process of lungs, and the patient who felt subjectively and objectively well, was dismissed. To the patient was highly recommended to have the lungs RTG exams done regularly. The eight-year-long control RTG exams showed that described change grew slowly, so in July 2003 it was concluded that the patient should be surgically treated.

RESULTS

During the operation the extempore biopsy was done. The tumor was smooth, oval shaped, 40x35x10 mm, and on the cut surface was soft, white colored with small cysts of 3 mm wide. The result of extempore biopsy was: benign lung tumor. The cystic tumor cavities were final histopathological results and filled with light acidophilic homogenous material, surrounded with cubical cells, partly light colored vacuolised cytoplasm. Stroma was fibrovascular, mostly moderated. The tumor was surrounded with atelectatic alveolar lung tissue. The results of immunohistochemical analysis were: EMA (+), CK (+), FVIII (-). The results led as to conclude that the diagnosis was: adenoma alveolare pulmonis.

DISCUSSION

Alveolar adenoma is benign solitary lung tumor, which can grow quite slowly. It can persist for quite a long time as an asymptomatic disease and it can only be detected on RTG exams. It is clinically important, as it can imitate different specific lung diseases, focal nonspecific inflammations, and primary and secondary malignant tumors. Histopathological differential diagnosis included benign tumors blood and lymphatic vessels (hemangioma sclerotics and lymphangioma), bronchoalveolar hyperplastic changes of pneumocytes type II and bronchoalveolar carcinoma (7).

CONCLUSION

For getting a precise diagnosis beside routine HE exams, it is necessary to use immunohistochemical analysis (3,8) to differ alveolar adenoma from already mentioned pathological lung processes.

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The manuscript was received: 15. 02. 2004.
Provisionally accepted: 15.03.2004.
Accepted for publication: 23.03.2004.