CAZURI CLINICE

Mucoepidermoid Carcinoma of Trachea in a 22 years old woman: a case report

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REZUMAT

Carcinom mucoepidermoid traheal la o pacientă de 22 de ani: prezentare de caz

Carcinomul epidermoid este o tumoră relativ frecventă a glandelor salivare. Se caracterizează prin secreţie mucoasă, tipul celular fiind intermediar sau scuamos. Localizarea bronşică şi mai ales trahealã a carcinomului mucoepidermoid este neobişnuită. Prezentăm cazul unei paciente de 22 de ani care s-a prezentat pentru dispnee de efort şi stridor apărute de două luni. Examinarea bronhoscopică a evidenţiat în trahee o masă tumorală cu suprafaţă lucioasă. După excizia chirurgicală, a fost confirmat histopatologic carcinomul mucoepidermoid slab diferenţiat.

Cuvinte-cheie: *trahee, mucoepidermoid, dispnee*

ABSTRACT

Mucoepidermoid carcinoma is a relatively common salivary glands tumor. This tumor is characterized by mucus secretion, cell type can be intermediate or squamous. Mucoepidermoid carcinoma of the bronchi and especially trachea is very unusual. We are reporting the case of a 22 years old female who presented with main complaint of exertional dyspnea and stridor for about 2 month. Bronchoscopy examination showed a mass with smooth surface in trachea. After surgery a low grade mucoepidermoid carcinoma was confirmed by pathological examination.

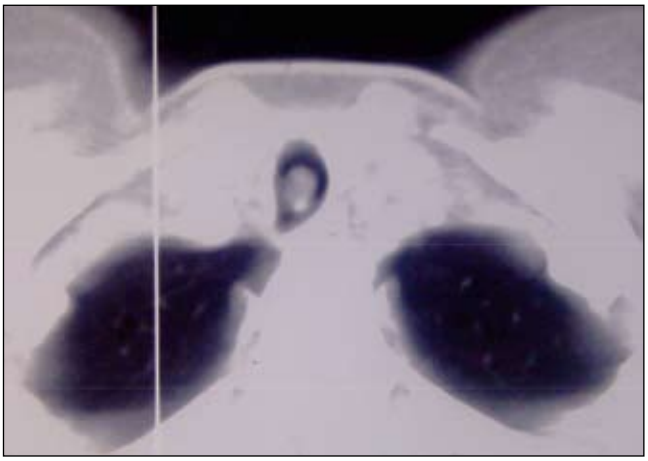
Keywords: *trachea, mucoepidermoid, dyspnea*

Introduction

Mucoepidermoid carcinoma is the most common malignant salivary gland tumor in adults and children [1]. It usually involves parotid and submandibular glands, as well as the minor salivary glands of the oral cavity and perimaxillary region. Mucoepidermoid tumors of the bronchial tree are very uncommon and represent only 1% of all pulmonary neoplasms [2]. This type of bronchial carcinoma occurs in patients between 3 to 18 years old [3] but most of the cases are seen in pediatric population. This tumor accounts for about 10% of primary lung tumors in this age group [1]. There are few case reports of lung mucoepidermoid in adults [4]. Here we are reporting a woman with an uncommon mucoepidermoid carcinoma of the trachea.

A 22 years old woman was referred to our pulmonary clinic with a history of exertional dyspnea for about 2 month. The patient did not have cough or dyspnea at rest. Physical examination didn't reveal wheezes or crackles but she had stridor in the tracheal area. Spirometry was performed; the flow-volume curve showed a fixed upper airway obstruction pattern with normal FEV1/FVC (85% of the predicted value). Spiral chest CT scan showed a 2 cm round mass in the right middle section of the trachea without any lung collapse (figure 1). Bronchoscopy showed a mass with smooth surface on the right in the middle section of the trachea without any endobronchial lesion in the right or left main bronchi. Because of the bronchoscopic appearance of the mass, which was a reddish surface with mesh – like dilated vessels (figure 2), we decided not to do biopsy and the patient was referred for surgical resection.

Figure 1. CT scan showing the presence of a homogenous mass in the trachea



Surgery was performed under general anesthesia with neck collar incision. The trachea was exposed 4 cm below the cricoid allowing for an approximately 2 cm mass to be seen in the right side of the trachea, without any invasion to external region of the trachea. Four cm of the trachea were resected and then trachea was anastomosed end to end. Four days later the patient was discharged home without any complication.

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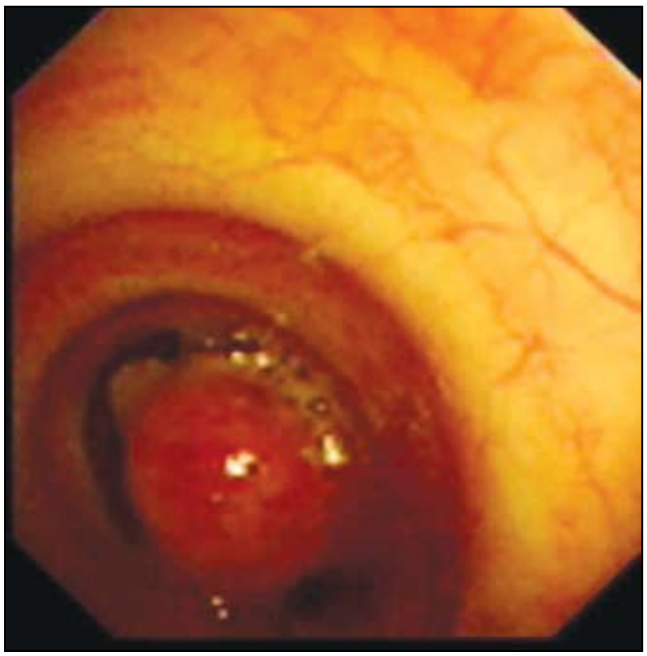
Figure 2. Endobronchial appearance of the tumor, with a smooth reddish surface with a network of superficial vessels



Gross pathologic examination showed a 2.5 cm firm mass. In microscopic examination fragments of sero-mucous glands containing squamous mucosa with malignant features were detected. The latter was composed of proliferated epithelial cells, which predominantly had clear cytoplasm. Some of them were arranged in a papillary pattern and most of them had glandular pattern with some cysts containing mucoid secretion. Final pathologic report was low grade mucoepidermoid carcinoma.

Two month later bronchoscopy was repeated, without any evidence of recurrence.

Discussion

Mucoepidermoid carcinoma is a rare lung tumor, which accounts for about 11% to 12% of all pulmonary tumors in children and being exceptional in adults. This type of carcinoma almost always originates from proximal bronchus and typically involves large airways. The symptoms and signs of bronchial mucoepidermoid carcinoma include cough, hemoptysis, wheezing, fever, chest pain and rarely clubbing of fingers [5]. Chest radiography may show nodular masses, areas of lung consolidation and partial or complete atelectasis [6]. Mucoepidermoid carcinoma of the bronchus mainly arises from the large airways including the main or lobar bronchi and may involve segmental bronchi or rarely the peripheral lung [5]. Most of the cases are met in pediatric wards and account for 10% of primary lung tumors in this age group [1].

It often presents as an exophytic luminal mass wich can be sesile, polypoid with a broad base connected to the bronchial wall or pedunculated with a well defined stalk. The size of the tumor varies from several millimeters to 6 cm in diameter [7].

We reported our experience with a patient who has been suffering from exertional dyspnea and stridor for about 2 months. The diagnosis of mucoepidermoid carcinoma of the trachea was confirmed by the pathologic examination after surgical resection. There are some reports of endobronchial mucoepidermoid tumor and only few of them are in adults [8]. All of the reports are of tumors in the main bronchus, while the tracheal mucoepidermoid carcinoma is rare.

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