
A 20 year-old male patient was presented to our department due to hemoptysis. Imaging Findings:

A 20 year-old male patient presented to our department due to hemoptysis for a period of one month. Patient's history, clinical examination and blood analysis was negative. Plain and contrast enhanced computed tomography revealed an oval, solitary, strongly enhancing lesion of 1.5 cm maximum diameter protruding from the posterior wall of the lower third of the trachea (Figure 1, 2). No extraluminal lesion or any additional findings from the lung parenchyma or mediastinum were revealed. The patient underwent a bronchoscopy in which a small spherical polypoid reddish lesion was shown assuming a polypoid configuration, attached to the posterior wall of the trachea, covered by intact mucosa (Figure 3). Pathologic examination of tissue sample showed that the lesion was a typical carcinoid. The patient underwent segmental resection of the trachea with direct anastomosis. One year later the patient is free of symptoms and without local or distance recurrence of the disease.
Discussion:

Bronchial carcinoid tumours constitute 1-5% of all lung tumours. They derive from neuroendocrine cells that the normal lung contains within the epithelium of the airways as single cells or as clusters, known as neuroepithelial bodies. (1) Most patients are younger than 40 and there is neither age predilection nor any relation to smoking or other environmental factors. There are two types of bronchial carcinoid: typical and atypical carcinoid. (2) Typical carcinoid represents the majority of cases (85% to 90%) and follows a relative benign course without presenting secretory activity or metastasis to distant sites. (3) On the other hand atypical carcinoids present clinical and cellular characteristics intermediate ranging from typical carcinoid to small cell carcinoma of the lung. (2) They present with coughing, wheezing or relapsing pneumonia due to obstructive phenomena. Due to their high vascularity (they receive blood supply from bronchial arteries) they may cause hemoptysis. They may secrete enough ACTH to cause Cushing’s syndrome, while carcinoid syndrome is rare and presents if only liver metastases exists. (4) Symptoms from intraluminal growth of these tumours may be the initial presentation of these lesions. Radiographically carcinoid tumours are usually solitary, round or oval, well-defined lesions and rarely exceed 4cm. Calcifications with a variety of patterns are occasionally identified and the tumour presents marked enhancement on CT and MRI examination. MRI may be more accurate in detecting these lesions since in T2-weighted sequences the high signal of the tumour compared with the dark background of the lung parenchyma makes the lesion more obvious than in CT. PET scanning on the other hand, due to the low metabolism of these tumours, does not demonstrate high uptake of FDG and does not allow the detection of the lesion or the differential diagnosis from benign pulmonary nodules. (5)

**Differential Diagnosis List:** Carcinoid tumor of the trachea

**Final Diagnosis:** Carcinoid tumor of the trachea

**References:**


Figure 1

Description: Small oval lesion attached to the posterior wall of the trachea. Origin:
Description: Polypoid intraluminal lesion with strong enhancement after contrast agent administration
Origin:
Description: Polypoid intraluminal lesion protruding from the posterior wall of the trachea with strong enhancement after contrast agent administration. Origin:
Description: Small spherical reddish lesion attached to the posterior wall of the trachea covered by an intact mucosa Origin: