Tracheal lipoma: Diagnosis and Treatment

Lipome tracheal: Diagnostic et Traitement

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Received: 16 Oeptember 2019; Accepted: 04 March 2020; Published online: 20 june 2020

ABSTRACT

Lipomas typically lay in the sub cutaneous tissues of patients. they are often present in the cephalic part of the body, specifically in the head, neck, shoulders, and backs of patients, although they can less commonly be seen elsewhere. Tracheal lipoma is extremely rare and only few cases have been reported in the literature. We describe a 56 years old patient with tracheal lipoma revealed by low abundance hemoptysis. The mass was successfully resected via rigid trachea bronchoscopy. The histopathological diagnosis confirmed a benign lipoma arising from the membranous trachea.
The investigation and management of tracheal lipoma are discussed and the literature is reviewed.
Keywords: Trachea; Lipoma; Diagnosis, Bronchoscopy.

INTRODUCTION

Only a few large series of primary tracheal tumors have been reported, the incidence of benign tumors ranges from 10 to 20 percent, and tracheal lipomas are among the rarest [1, 2]
The clinical symptoms are caused by airway obstruction and radiographic finding is non-specific. It may be removed endoscopically but in few cases large resection by open surgery has to be performed to prevent recurrence.

OBSERVATION:

A 56-year-old man was referred to pneumology service for low abundance hemoptysis. He has hypertension, chronic renal failure and 50 pack-year smoking history.
The patient underwent a flexible bronchoscopy, which revealed yellowish pedunculated mobile lesion, with a smooth surface, implanted on the left lateral wall of the trachea. It caused the obstruction of approximately 20% of the tracheal lumen. The underlying tracheal mucosa appeared normal. A biopsy concluded to a fatty tissue.
A thoracic radiograph and computed tomographic scan revealed a 1.2 cm mass in the midportion of the trachea, arising 6 cm below the vocal cords, without significant lymphadenopathy, parenchymal lung lesions, pleural or other organ involvement (figure 1).

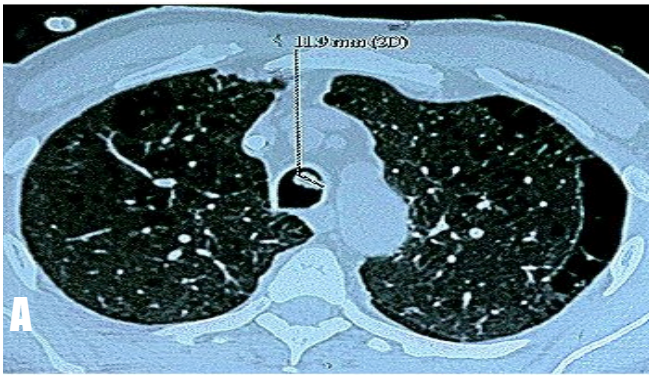

Figure 1:Axial MPR image showed a 1.2 cm mass arising from the lateral wall of the midportion of the trachea located 4 rings above the carina.

The patient was referred to our ENT service. He underwent rigid tracheoscopy, electrocoagulation and Patterson forceps were used with successful complete removal of the tumor. Gross examination revealed a pedunculated, yellowish soft tissue measuring 2.0 cm (figure 2).

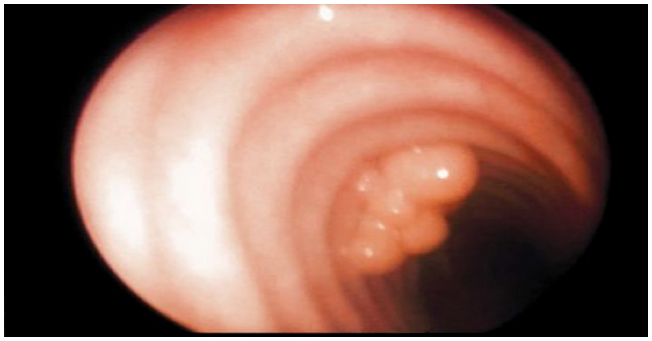

Figure 2: Tracheoscopy shows a pedunculated mobile lesion, with a smooth surface, implanted on the left lateral wall of the trachea. Histological examination concluded to a benign pure lipoma.

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DISCUSSION:

Lipoma arises from the sub-mucosal fat of the tracheobronchial tree and can extend between the cartilage rings into the peritracheal tissue [3]. Approximately 50% of the benign tracheal neoplasms occur in the lower third of the trachea and are generally pedunculated [4].

Patients can be asymptomatic or can present intermittent or progressive dyspnea, hemoptysis and cough. Fever, expectoration and asthenia, can be observed caused by secondary infections. Physical examination can reveal clinical signs of airway obstruction such as wheezing, stridor, tachypnea and accessory muscle recruitment during respiration

The gold standard in the diagnosis of tracheal lipoma is the flexible tracheobronchoscopy. Macroscopically airways lipoma looks as a yellowish, lobulated, pedunculated or broad-based, fatty submucosal growth [5].

Computed tomography is extremely valuable in localizing the origin and extent of the tumor. They manifest as a pedunculated or a broad based homogeneous lesion with attenuation around -100 HU [6,7].

The treatment of tracheal lipoma is its excision by tracheobronchoscopy performed with laser or electrosurgical snaring forceps, cryotherapy or argon plasma coagulation [5, 8-10]

Excision by thoracotomy or sternotomy is indicated in cases in which there are mucosal or submucosal extensions of the lipoma or in cases of endoscopic treatment failure [2]

CONCLUSION:

Tracheal lipoma is an extremely rare pathology which clinical feature can be confused with other pulmonary or laryngeal diseases. Its management should be at best endoscopic excision.

Compliance with ethical standards

Conflict of interest: The authors stated that there is no conflict of interest.

Funding Statement: The authors received no specific funding for this work.

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