



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Clinical Image

Endobronchial Leiomyoma—An Underdiagnosed Tumor

Selene Cuenca Peris^{a,*}, María José Aleixandre Barrachina^b, Jose Joaquín Torres Relucio^a

^a Department of Pneumology, General University Hospital of Castellon, Spain

^b Department of Pathological Anatomy, General University Hospital of Castellon, Spain

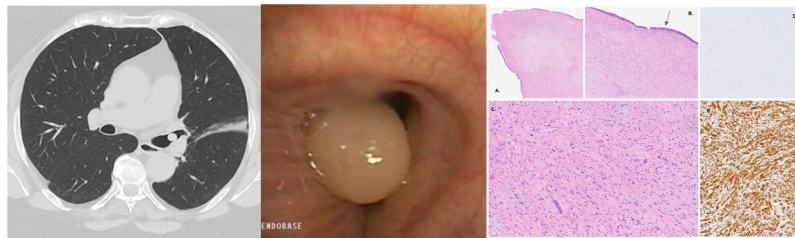


Fig. 1. Computed tomography thorax (a), bronchoscopic image (b) of endobronchial leiomyoma at left main bronchus and anatomical-pathological image (c: A. Bronchial biopsy showing a well-circumscribed lesion with polypoid appearance. Hematoxylin–eosin (H&E) staining 1×. B. Cellular proliferation lined by bronchial epithelium (black arrow). H&E 4×. C. At higher power view there's a fascicular proliferation of spindle cells with minimal atypia, forming intertwined fascicles with cellular density. No mitotic figures or necrosis areas are seen. H&E 10×. D. Isolated cells with nuclear staining, showing a low cellular proliferation (<1%). Ki67 10×. E. Cytoplasmic staining, diffusely positive. Desmin 10×).

A 65 year-old female, non smoker, with history of allergic asthma was referred to study an increase in non-productive cough for several months after COVID-19 infection. Computed tomography (CT) thorax showed a solid round image at left main bronchus and subsegmental atelectasis in the lúgula (Fig. 1a). Flexible bronchoscopy showed a well-defined endoluminal lesion of elastic consistency, pedunculated, adhered to the division carina of the left upper and lower lobe bronchus (Fig. 1b). The lesion was excised using forceps and pathological result was leiomyoma.

Endobronchial leiomyoma is an uncommon benign tumor (2%) with slow-growing.¹ The most frequent symptoms are cough (53%), dyspnea (47%) hemoptysis and recurrent pneumonia.² CT thorax findings are homogeneous endoluminal lesions with intraluminal growth.¹ Bronchoscopic vision shows well-defined lesions. Most are usually submucous or pedunculated.¹ The diagnosis is pathological. Small tumors can be removed during the initial

bronchoscopic using snare or forceps. In case of large tumors, advances in bronchoscopic instrumentation permit debulk it with electrocautery snare, Nd YAG laser or microwave ablation.²

In summary, leiomyoma usually is an incidental diagnostic due to non-specific symptoms. Suspected diagnosis is established by CT and bronchoscopy characteristic images although the confirmation diagnosis is the pathological anatomy of the biopsy.

References

1. Bawaadam H, Ivanick N, AlShelli I, Krishna G. Endobronchial leiomyoma: a case report with cryoprobe extraction and review of literature. *Respir Med Case Rep.* 2021;33:101467, <http://dx.doi.org/10.1016/j.rmcr.2021.101467>. PMID: 34401303; PMCID: PMC8349092.
2. Insler JE, Seder CW, Furlan K, Mir F, Reddy VB, Gattuso P. Benign endobronchial tumors: a clinicopathologic review. *Front Surg.* 2021;8:644656, <http://dx.doi.org/10.3389/fsurg.2021.644656>. PMID: 33748183; PMCID: PMC7973360.

* Corresponding author.
E-mail address: selenecp@gmail.com (S. Cuenca Peris).