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Clinical Image

Endobronchial Leiomyoma—An Underdiagnosed Tumor

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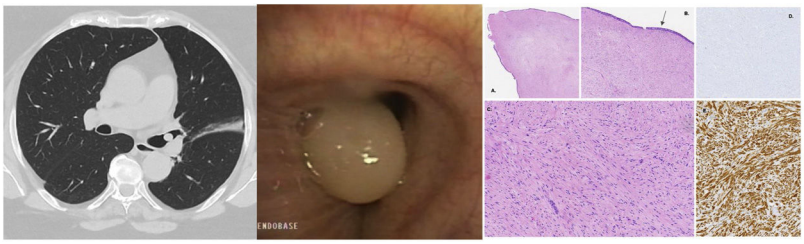

Fig. 1. Computed tomography thorax (a), bronchoscopic image (b) of endobronchial leiomyoma at left main bronchus and anatomical-pathological image (c: A. Bronchial biopsy showing a well-circumscribed lesion with polypoid appearance. Hematoxylin–eosin (H&E) staining 1×. B. Cellular proliferation lined 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 língula (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%) hemoptisis 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

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