


Benign endobronchial lipoma causing repeated pneumonia

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Associate Editor: Jennifer Ann Wi

Key message

Endobronchial lipomas are rare; nonetheless, physicians should consider them as a differential diagnosis in patients with repeated pneumonia. Computed tomography and bronchoscopy are recommended for diagnosis. In this case, the patient's cough was ameliorated after undergoing a right basal segmentectomy.

KEYWORDS

asthma, bronchial obstruction, endobronchial lipoma, repeated pneumonia

CLINICAL IMAGE

A 48-year-old male smoker presented to our hospital after 1 day of fever and persistent cough. He had a history of

asthma since early childhood and a previous episode of pneumonia treated with antibiotics 5 years prior. During the physical examination, mild coarse crackles were auscultated in the right lung. Blood tests revealed an

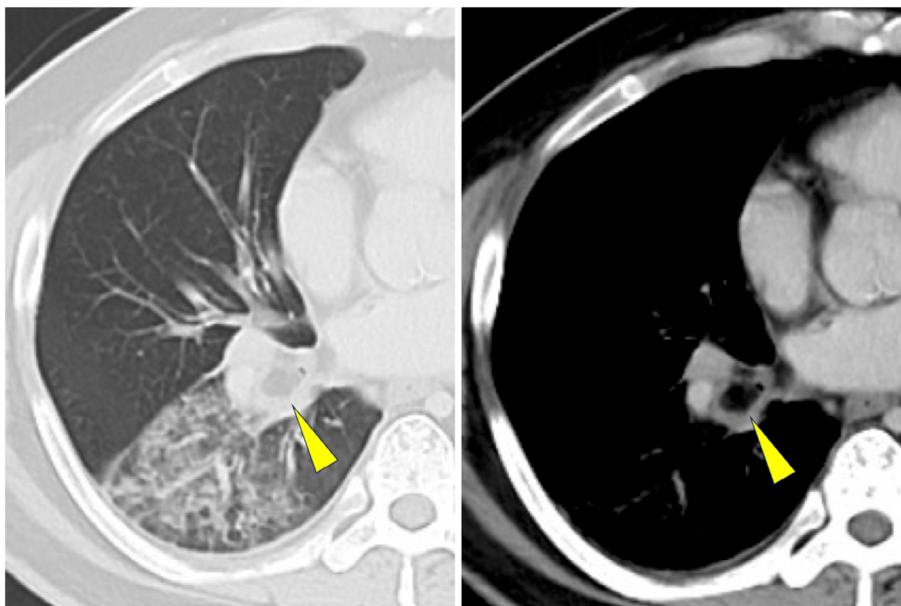


FIGURE 1 Computed tomography showing infiltrating shadows in the right lower lobe, corresponding to the site of previous pneumonia. Additionally, adipose density is observed within the right lower bronchus (arrowheads).

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elevated white blood cell count of 12,200/ μ L and an elevated C-reactive protein level of 5.70 mg/dL. Chest x-ray examination showed dense consolidation in the right lung field. Chest computed tomography revealed infiltrating shadows in the right lower lobe corresponding to the previous pneumonia site. Additionally, adipose density was observed within the right lower bronchus (Figure 1, arrowheads). Bronchoscopy identified a smooth-surfaced mass filling the right basal bronchus lumen (Figure 2, arrow). The patient underwent a right basal segmentectomy, resulting in the pathological diagnosis of an

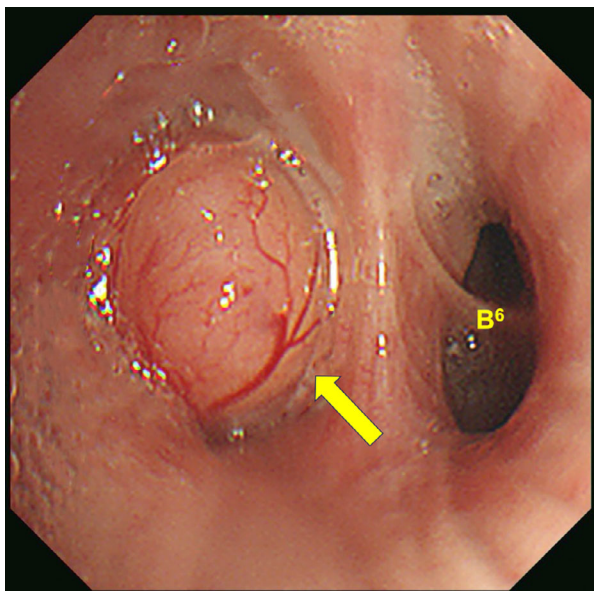


FIGURE 2 Bronchoscopy revealing a smooth-surfaced mass filling the right basal bronchus lumen (arrow).

endobronchial lipoma (Figure 3), and his cough improved after the procedure. Benign bronchial tumours often gradually enlarge, thereby eluding detection and leading to symptom misinterpretations, such as cough attributed to asthma or chronic obstructive pulmonary disease.^{1,2} Endobronchial lipomas are rare; nonetheless, physicians should consider them as a differential diagnosis, particularly in patients exhibiting repeated pneumonia.

AUTHOR CONTRIBUTIONS

Yasutaka Kawasaki, Kohei Yamamoto, Takuya Suda, Daisuke Saito, and Isao Matsumoto participated in the management of the patient. Yasutaka Kawasaki wrote and revised the manuscript. All authors have read and approved the final version of the manuscript.

ACKNOWLEDGMENTS

We would like to thank Editage (www.editage.jp) for English language editing.

CONFLICT OF INTEREST STATEMENT

None declared.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ETHICS STATEMENT

The authors declare that appropriate written informed consent was obtained for the publication of this manuscript and accompanying images.

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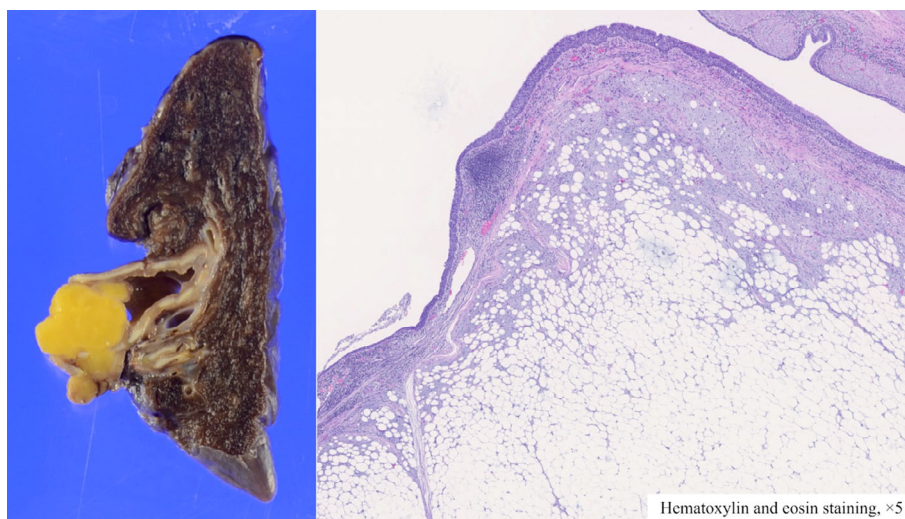


FIGURE 3 Histopathology of the neoplasm at low magnification demonstrating mature adipocytes with slight variations in size, undergoing proliferation in a polypoidal manner within and beyond the bronchial lumen. The surface of the endobronchial component is coated with bronchial epithelium (Haematoxylin and eosin staining, original magnification $\times 5$). The neoplasm is consistent with a diagnosis of lipoma.

REFERENCES

1. Stevic R, Milenkovic B. Tracheobronchial tumors. *J Thorac Dis.* 2016; 8:3401–13. <https://doi.org/10.21037/jtd.2016.11.24>
2. Basoglu A, Celik B, Akdag AO, Sengul AT. Endobronchial lipoma: a rare cause of bronchial occlusion. *Interact Cardiovasc Thorac Surg.* 2004;3:263–4. <https://doi.org/10.1016/j.icvts.2003.11.014>

How to cite this article: Kawasaki Y, Yamamoto K, Suda T, Saito D, Matsumoto I. Benign endobronchial lipoma causing repeated pneumonia. *Respirology Case Reports.* 2023;11:e01237. <https://doi.org/10.1002/rccr2.1237>