



Mucocele Presenting as Polypoid Bronchoscopic Lesion with Post-Obstructive Pneumonia

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A 33-year-old male with a history of occasional tobacco smoking and daily marijuana smoking was hospitalized with left lower lobe (LLL) pneumonia, having had three similar episodes over the preceding year. Computed tomographic (CT) imaging showed LLL consolidation. Bronchoscopy revealed thick mucoid casts requiring cryo-extraction. Also noted was a fleshy polypoid endobronchial mass in the LLL lateral–basal segmental bronchus (Fig. 1a), which was avascular under narrow band imaging (Fig. 1b). Bronchoscopic excisional biopsy revealed a polypoid fragment of bronchial wall tissue with subepithelial extruded mucin, abundant foamy macrophages, and associated acute and chronic inflammation (Fig. 2). Immunostaining methods for cytokeratin (AE1/AE3) and S100 were negative, while CD68 highlighted the numerous macrophages. GMS and AFB special stains were negative for organisms. The histologic appearance was consistent with a ruptured mucocele with associated inflammatory reaction. To our knowledge, this is the first reported instance of a mucocele presenting as an endobronchial obstruction causing recurrent pneumonia. At one-year follow-up, the patient had had no recurrence of pneumonias or any respiratory symptoms.

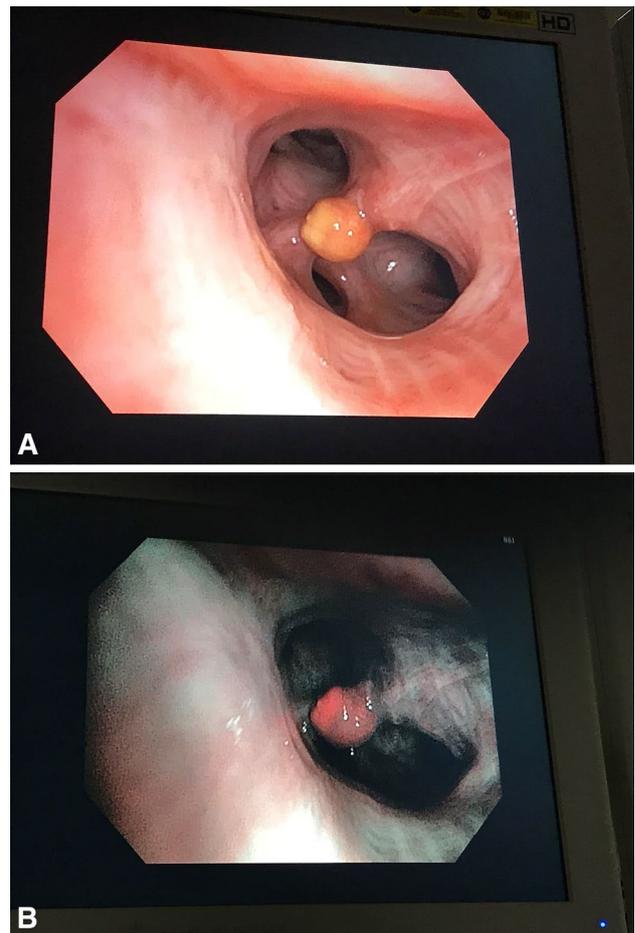


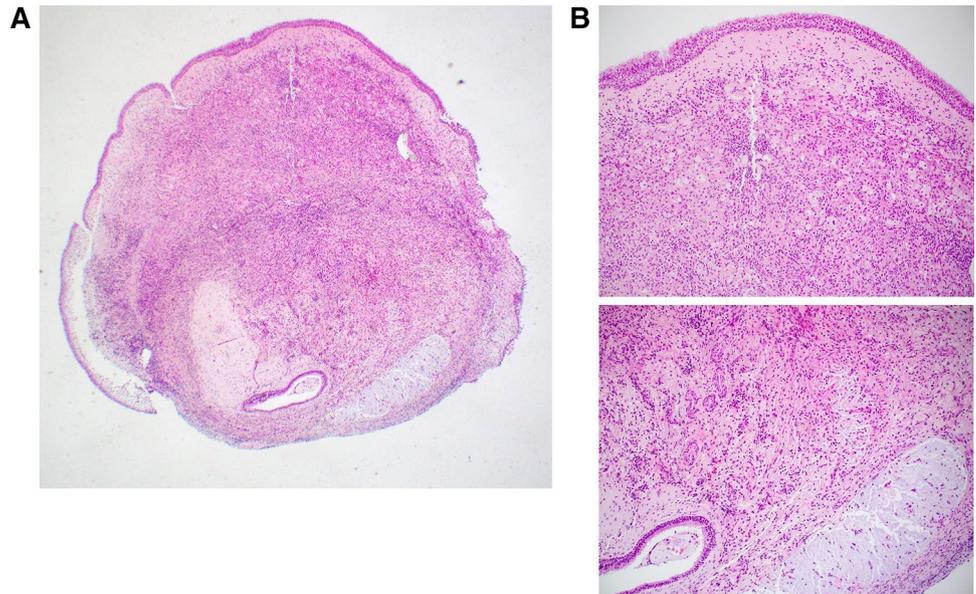
Fig. 1 Bronchoscopy revealing a fleshy polypoid lesion in the LLL lateral–basal segmental bronchus. **a** White light bronchoscopy. **b** Narrow band imaging demonstrating avascularity of the endobronchial lesion

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Fig. 2 Histology of the excised polypoid lesion. **a** Microscopy showing a polypoid fragment of bronchial epithelium. **b** Features consistent with acute and chronic inflammation along with abundant foamy macrophages and extruded mucin



Compliance with Ethical Standards

Conflict of interest The authors have no conflicts of interest to disclose.

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