A 69-year-old man presenting with persisting dry cough was referred to our hospital. A chest roentgenogram showed an abnormal shadow in the right lower lung field. Chest computed tomographic scan revealed a nodular lesion including a homogeneous fat density area, accompanied with obstructive change in the right posterior basal segment (Fig. 1, left: axial view; right: sagittal view). Bronchoscopy revealed a smooth, polypoid lesion protruding into the bronchial lumen, which occluded the orifice of the posterior basal bronchus (Fig. 2). Bronchoscopic biopsy of the lesion showed no neoplastic cells, and serum tumor markers such as carcinoembryonic antigen, carbohydrate antigen 19–9 and squamous cell carcinoma antigen were all negative. This patient underwent right lower lobectomy of the lung because malignant lung tumor could not be ruled out.

The resected specimen showed a yellowish, elastic soft and well-demarcated nodule, 2.1 cm in diameter. The lesion demonstrated a dumbbell configuration, partially extending from the endobronchial lumen into the lung parenchyma. Pathological diagnosis was a lipoma consisting of mature adipose tissue surrounded by a thin fibrous capsule. The patient is doing well with no evidence of recurrence 15 months after the operation.