

# Endobronchial Solitary Fibrous Tumor: Imaging and Bronchoscopic Findings

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To the Editor: A 49-year-old man presented with a cough and short of breathing for 3 months' duration. He went to different hospitals and received treatment of antibiotics for pneumonia in the left low lobe. On physical examination, cyanosis of lips and auscultation of the chest showed the left-side breath sounds decreased. Computed tomographic (CT) scan, coronal CT and imaging of virtual bronchoscopy of the chest demonstrated a round lesion in the left main bronchus and the left main bronchus was almost completely obstructed by the mass [Figure 1a]. Bronchoscopy showed a round pinkish polypoid tumor obstructing the distal portion of the left main bronchus [Figure 1b]. We initially considered the lesion might be a carcinoid, leiomyoma, or solitary fibrous tumor (SFT). And CT enhancement of this lesion was not significant. Hence, we obtained some tissue by bronchoscopic biopsy. And biopsy revealed fibrous tumor. After this, we talked with the patient and his family members of treatments of this disease and the benefits and risk. The patient chose surgery. Eventually, we obtained a 2 cm × 2 cm mass by surgical resection and the histological examination affirmed a SFT with a positive response for CD34, CD100 and CD99, and negative for actin, CK and anaplastic lymphoma kinase by immunohistochemical study.

SFT was first reported in 1931 originating from the pleura.<sup>[1]</sup> SFTs most often grow in the pleura. The endobronchial SFT is

extremely rare. More than 50% of the patients are asymptomatic,<sup>[2]</sup> while SFTs growth in the airway may cause bronchial obstruction, obstructive pneumonia, and dyspnea. Many treatment ways, ranging from endobronchial techniques (yttrium aluminum garnet (YAG) laser, argon plasma coagulation, etc.) to surgical resection, are available. In cases of endobronchial SFT, sleeve-resection of the airway with preservation of lung parenchyma is a feasible surgical option.<sup>[3]</sup> Patients can get good prognosis treated by complete sleeve-resection of the tumor. After surgery, adjuvant therapy is generally not recommended in the histologically benign lesion.<sup>[4]</sup> Because these tumors may have high recurrence rates, regular follow-up with radiographic even bronchoscopic studies is advised.<sup>[3]</sup>

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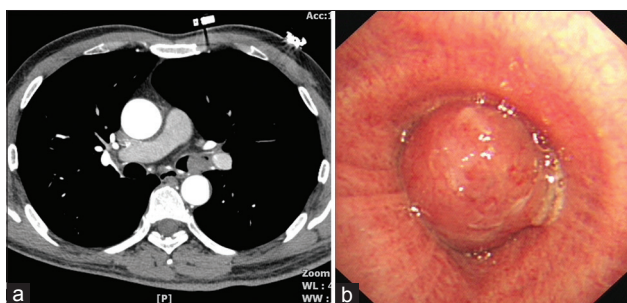
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## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

1. Klemperer P, Rabin CB. Primary neoplasm of pleura: A report of 5 cases. *Arch Pathol* 1931;11:358-412.
2. Geramizadeh B, Banani A, Moradi A, Hosseini SM, Foroutan H. Intrapulmonary solitary fibrous tumor with bronchial involvement: A rare case report in a child. *J Pediatr Surg* 2010;45:249-51.
3. Pak PS, Yanagawa J, Abtin F, Wallace WD, Holmes EC, Lee JM. Surgical management of endobronchial solitary fibrous tumors. *Ann Thorac Surg* 2010;90:659-61.
4. de Perrot M, Fischer S, Bründler MA, Sekine Y, Keshavjee S. Solitary fibrous tumors of the pleura. *Ann Thorac Surg* 2002;74:285-93.



**Figure 1:** Computed tomographic scan showed a round lesion in the left main bronchus and the left main bronchus was almost completely obstructed by the mass (a). And bronchoscopy showed a round pinkish polypoid tumor obstructing the distal portion of the left main bronchus (b).

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