

Clinical Image

Unexpected Spontaneous Expectoration of an Endobronchial Squamous Cell Carcinoma

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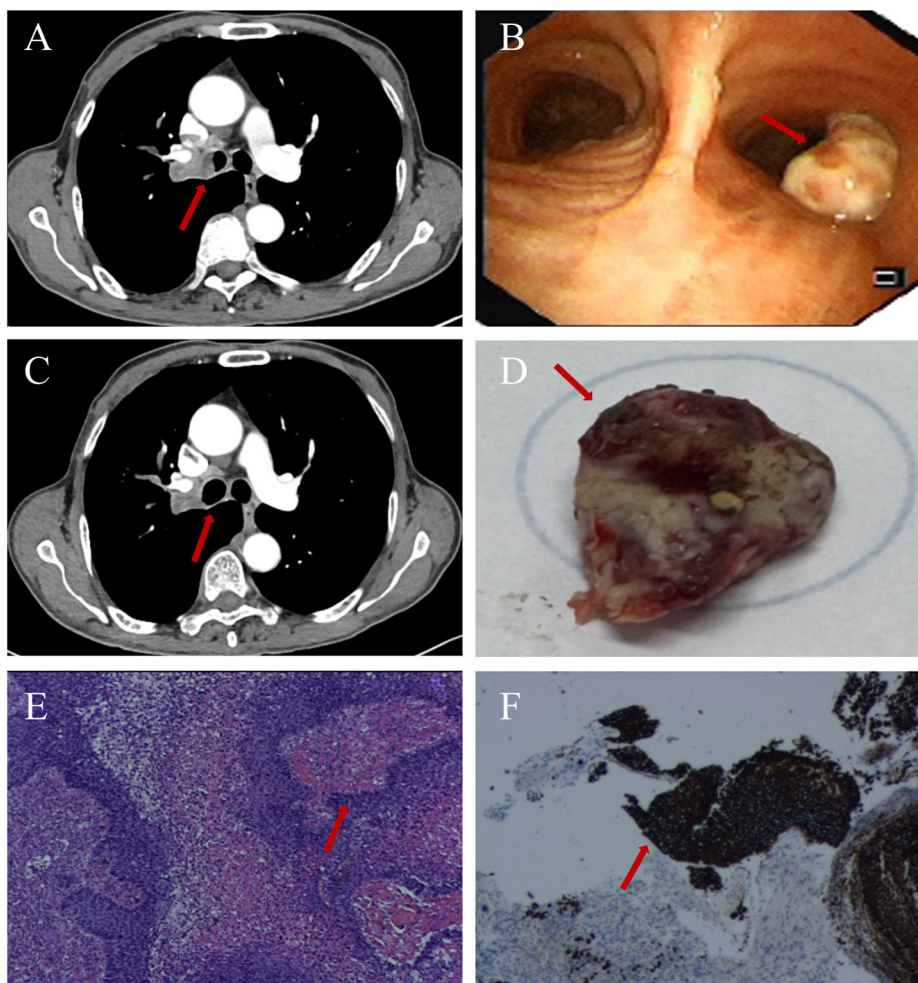


Fig. 1. Thoracic CT section (A) showing obstruction of the right main bronchus (arrow). Flexible bronchoscopy (B) reveals an endobronchial neoplasm at the corresponding site (arrow). Follow-up thoracic CT (C) demonstrates restored patency of the previously obstructed bronchial lumen (arrow). Macroscopic view of the spontaneously expectorated tissue mass (D) (arrow). Histopathological examination (E) and immunohistochemical staining (F) confirm the diagnosis of squamous cell carcinoma (arrows).

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A 75-year-old man presented with cough. Thoracic computed tomography (CT) performed on October 15th, 2025, revealed a mass causing luminal obstruction of the right main bronchus (Fig. 1A, arrow). Subsequent bronchoscopy on October 24th, 2025, demonstrated a corresponding endobronchial neoplasm at the same site (Fig. 1B, arrow). On November 7th, 2025, the patient spontaneously expectorated a 2.5 cm × 2.0 cm × 1.0 cm tissue fragment (Fig. 1D), after which he reported marked improvement in respiratory symptoms. Follow-up CT on November 9th, 2025, showed restoration of bronchial lumen patency at the previously obstructed site, with only minor, self-limited hemorrhage (Fig. 1C, arrow). Histopathological examination of the expectorated specimen on November 11th, 2025, confirmed the diagnosis of squamous cell carcinoma (Fig. 1E and F).

Spontaneous expectoration of an endobronchial primary lung carcinoma is an exceedingly rare event. Although similar cases have been reported involving pulmonary adenocarcinoma or metastatic endobronchial tumors [1,2], spontaneous expectoration of an endobronchial squamous cell carcinoma has not been previously documented to our knowledge. While such expectoration may result in transient relief of airway obstruction, comprehensive oncologic evaluation and prompt formulation of an appropriate treatment strategy remain essential.

Artificial intelligence involvement

No material within this manuscript has been produced, either partially or totally, with the help of any AI software or tool.

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Conflicts of interest

None declared.

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References

- [1] Sharma KB. Spontaneous expectoration of lung tumour mass. *CMAJ* 2005;172:1182.
- [2] Dixit R, Goyal M, Kasliwal N, Somson HT, Agarwal S. Spontaneous expectoration of tumor tissue in primary adenocarcinoma lung. *Avicenna J Med* 2021;11:46–8.