

# Airway Obstruction Due to Invasive Tracheobronchial Aspergillosis



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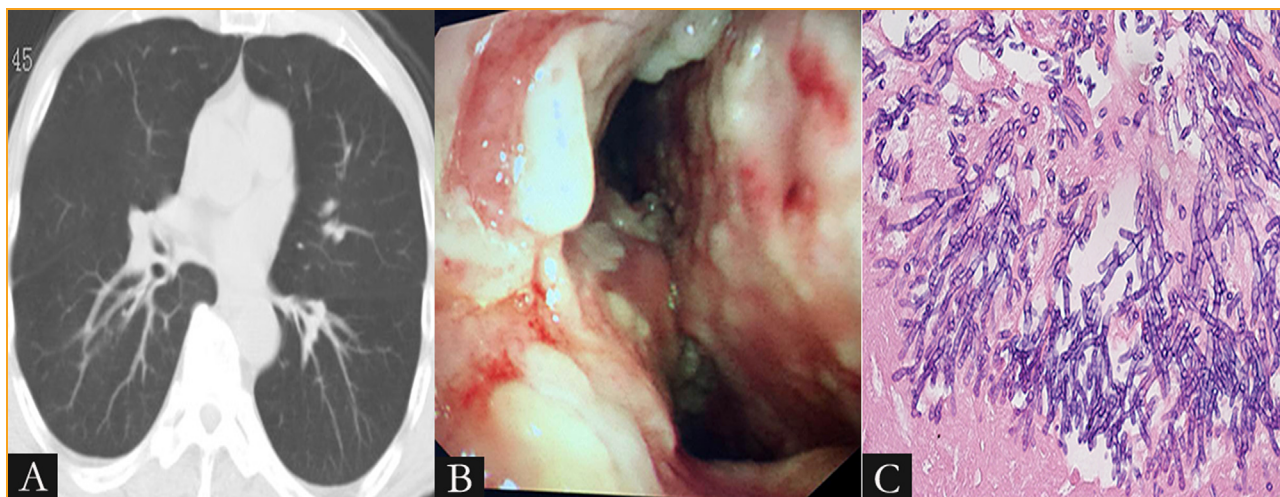


FIGURE.

## CASE PRESENTATION

A 74-year-old previously healthy man was admitted to the Intensive Care Unit because of rapidly progressive fatal respiratory failure. Adjusting the ventilation parameters failed to ameliorate his severe expiratory flow limitation, and the measured intrinsic positive end expiratory pressure was up to 20 mm Hg. Chest computed tomography showed diffuse bronchial thickening with luminal narrowing (Figure A). Bronchoscopy revealed a mass of irregular, yellowish-white plaques, with edematous and inflammatory changes in the bronchial mucosa (Figure B). A biopsy specimen showed extensive necrosis, with fungal hyphae, compatible with *Aspergillus* infection (Figure C). Although voriconazole and caspofungin were started immediately and inhaled amphotericin B was added, the patient died of multiple organ dysfunction.

Invasive tracheobronchial aspergillosis usually develops in severely immunocompromised patients afflicted with diseases such as transplantation, human immunodeficiency virus infection, or cancer. Although there have been several cases of tracheobronchial aspergillosis in immunocompetent or mildly immunocompromised

patients, such as those with alcoholism, chronic liver disease or diabetes,<sup>1</sup> severe expiratory flow limitation is rare in such patients. Sepsis-induced immune suppression can lead a previously immunocompetent patient to develop a fulminant superinfection.<sup>2</sup> Although a patient was treated successfully by removing the hyperplastic tissue induced by *Aspergillus*,<sup>3</sup> our patient could not be treated in this manner because the *Aspergillus* had destroyed the entire structure of the tracheobronchial system. Bronchoscopy is essential to demonstrate endobronchial abnormalities and to obtain biopsies to make the diagnosis, especially when severe expiratory flow limitation fails to improve.

## REFERENCES

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