Surgical Approach to Aspergilloma in Post-TB Patients with Massive Hemoptysis: A Case Series

Daud Yudhistira Sukanto

Resident of Department of Thoracic, Cardiac, and Vascular Surgery, Dr. Soetomo General Academic Hospital, Faculty of Medicine-Universitas Airlangga, Surabaya, Indonesia

Dhihintia Jiwangga

Senior Consultant of Department of Thoracic, Cardiac, and Vascular Surgery, Dr. Soetomo General Academic Hospital, Faculty of Medicine-Universitas Airlangga, Surabaya, Indonesia

Mohamad Rizki

Senior Consultant of Department of Thoracic, Cardiac, and Vascular Surgery, Dr. Soetomo General Academic Hospital, Faculty of Medicine-Universitas Airlangga, Surabaya, Indonesia

IGB Chandogya Giriastawa

Senior Consultant of Department of Thoracic, Cardiac, and Vascular Surgery, Dr. Soetomo General Academic Hospital, Faculty of Medicine-Universitas Airlangga, Surabaya, Indonesia

Abstract:

Background: Aspergilloma, often occurring in patients with pre-existing pulmonary conditions such as tuberculosis (TB), is a fungal mass that can lead to recurrent or life-threatening hemoptysis. Surgical intervention, particularly lobectomy, is frequently required when conservative management fails, especially in cases of massive hemoptysis.

This case series aims to report the surgical outcomes and challenges of lobectomy performed in patients with aspergilloma and recurrent hemoptysis, often complicated by previous TB treatment and lung pathology.

Case Presentation: We present five cases of patients with a history of pulmonary TB who presented with recurrent or massive hemoptysis. Each patient was diagnosed with aspergilloma based on clinical presentation and radiological findings. All patients underwent lobectomy due to the failure of conservative treatments, such as bronchial artery embolization, and intraoperative findings, including dense adhesions and uncontrolled bleeding, were documented.

Discussion: Of the five patients, three required conversion from video-assisted thoracic surgery (VATS) to open thoracotomy due to dense adhesions or bleeding complications. One patient experienced a postoperative lung abscess requiring reoperation, while the other four patients had an uneventful postoperative recovery. All patients were successfully discharged, with follow-up showing no recurrence of hemoptysis.

Conclusion: Lobectomy is an effective treatment for aspergilloma-associated hemoptysis in patients with prior pulmonary TB. However, surgery is often complicated by dense adhesions, intraoperative bleeding, and postoperative infections. Early surgical intervention, particularly in recurrent hemoptysis, may reduce the risk of complications and improve patient outcomes.

Keywords:

Aspergilloma, Hemoptysis, Pulmonary tuberculosis, Lobectomy, Surgical management, Bronchiectasis, Fungal lung infection

Proceedings of International Conference - 2025