

Aspergilloma

Arnaud G. L'Huillier MD, Isaac I. Bogoch MD

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A 72-year-old man with a long history of bilateral bronchiectasis underwent computed tomography (CT) in 2010. The scan showed a large aspergilloma in the right upper lobe, measuring 6.3 × 5.0 cm, surrounded by pleural thickening (Figure 1A). *Aspergillus fumigatus* was identified on sputum cultures, and an extensive immunodeficiency workup came back negative. Surgical resection was deferred because the patient was minimally symptomatic. Six years later, the patient presented with frank hemoptysis that persisted despite interventional embolization of arteries in the right upper lobe supplying the affected region. He underwent a right upper lobectomy and evacuation of the aspergilloma (Figure 1B). Hyphae were seen on calcofluor staining of the tissue specimen and *A. fumigatus* was identified. Because of the moderate-to-high risk of perioperative spillage, we started the patient on voriconazole. Despite a complicated immediate postoperative course with respiratory failure requiring a tracheotomy, his condition eventually stabilized and improved with use of voriconazole.

Aspergillus is a ubiquitous mould that can cause clinically significant infections, mostly in immunocompromised patients; immunocompetent patients with structural lung disease, such as bronchiectasis, are also at risk, as in our patient.¹ A guideline from the Infectious Diseases Society of America recommends regular clinical and radiologic monitoring in patients with aspergilloma who are asymptomatic and have stable imaging.² Surgical intervention is required in patients with hemoptysis or other severe symptoms, with addition of antifungal treatment in case of moderate-to-high risk of perioperative spillage.² For carefully selected patients, bronchoscopic removal of the aspergilloma is a novel, minimally invasive alternative approach.³ Our case reflects the importance of interdisciplinary management of aspergilloma with medical care and surgical intervention as required.

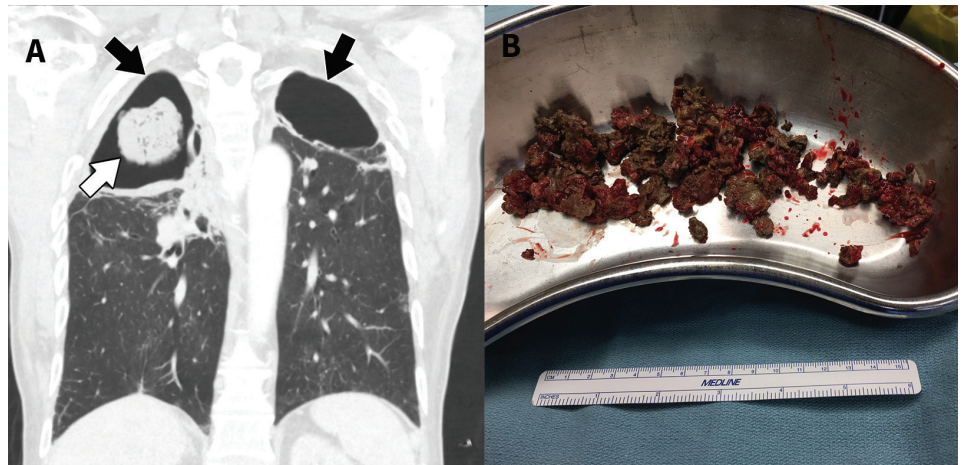


Figure 1: (A) Coronal view of computed tomography scan of the chest of a 72-year-old man with bronchiectasis, showing bilateral large apical cavities (black arrows). The right apical cavity is surrounded by pleural thickening and contains a ground glass opacity and a consolidation (aspergilloma) measuring 6.3 × 5.0 cm (white arrow). (B) Macroscopic aspect of the aspergilloma following right upper lobectomy, showing a mixture of aspergilloma and clotted blood.

References

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Affiliations: The Hospital for Sick Children (L'Huillier); Toronto General Hospital (Bogoch), Toronto, Ont.

Correspondence to: Arnaud L'Huillier, arnaud.lhuillier@sickkids.ca

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