



FORGOTTEN GRASS ASPIRATION DURING A CHILDHOOD GAME - COMPLICATIONS IN ADULthood

PETROVIĆ VLAHOVIĆ A.¹, Glodić G.², Popović F.², Baričević D.², Badovinac S.²

¹ Special hospital for lung disease "Rockefellerova", Zagreb, Croatia
Department of Pulmonology

² University Hospital Centre Zagreb, Zagreb, Croatia
Clinic for Lung Diseases Jordanovac

Objective:

Background: Endobronchial foreign body is a rare but potentially life-threatening diagnosis. If not recognized and treated promptly, it can cause recurrent pneumonia, bronchiectasis, recurrent haemoptysis and other complications. Here we present a case of a bizarre foreign body found in a patient with a history of recurrent pneumonia.

Case report: A 19-year-old male with a history of recurrent pneumonia and no other comorbidities was admitted to our tertiary teaching hospital for further diagnostic evaluation after a foreign body with a metallic appearance and empyema were revealed on a chest CT scan in another institution. Flexible bronchoscopy discovered a branched black foreign body covered in pus in the lateral segment of the right lower lobe (RB9). Extraction with forceps was attempted but the foreign body disintegrated so it



was only partially removed. Particles of the foreign body were immediately recognized by the patient and identified as a grass known as wall barley (*Hordeum murinum*). He remembered he accidentally inhaled it during a game in his childhood but did not consider that information significant. With a tendency of complete removal, a combined rigid and flexible bronchoscopy was performed under general anaesthesia. Parts of the grass were repeatedly extracted with standard biopsy forceps and rat tooth grasping forceps until completely removed. A follow-up CT scan described cystically dilated bronchi in the RB9 segment and no remaining foreign body.

Conclusion: Even if not obvious from patient history, endobronchial foreign body should be considered as a possible differential diagnosis of recurrent pneumonia. Mineralization of organic material trapped in the airway for a prolonged period of time can lead to unusual appearances on conventional chest films and CT scans. Timely recognition of foreign body aspiration and accessibility of rigid bronchoscopy can reduce long-term complications such as recurrent pneumonia and bronchiectasis.