



Bullous emphysema in a cannabis user

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A 48-year-old man presented with progressive dyspnea for 2 years that had been worsening for one month, preventing daily activities. His oxygen saturation was 88%. He had a history of active, daily, heavy marijuana smoking for the last 30 years and no history of tobacco use. Chest CT showed large emphysematous bullae predominating in the upper fields of the lungs, the largest one in the right lung. The patient was later referred for surgical bullectomy. His bullous emphysema was attributed to heavy cannabis use.

Cannabis is the most widely used illicit drug in the world and the second most commonly smoked substance after tobacco. The specific effects of cannabis smoking are subject to confounding by concomitant tobacco use, although the pathological changes occur approximately 20 years earlier than in tobacco smokers. Cannabis is usually smoked without a filter, and users inhale larger volumes with longer breath holds when compared with tobacco smokers. Such usage may cause increased

intra-alveolar pressure with significant barotrauma. Paraseptal emphysema may represent an early stage of apical bulla formation. Affected patients are predisposed to the development of bullous emphysema, pneumothorax, and pneumomediastinum. Other thoracic complications, such as lung cancer, myocardial infarction, and alveolar hemorrhage, are less common.⁽¹⁻³⁾

AUTHOR CONTRIBUTIONS

All of the authors equally contributed to reviewing the literature, analyzing the images, writing and reviewing of the manuscript, and approving the final version of the manuscript.

CONFLICTS OF INTEREST

The authors declare having no conflicts of interest to express.

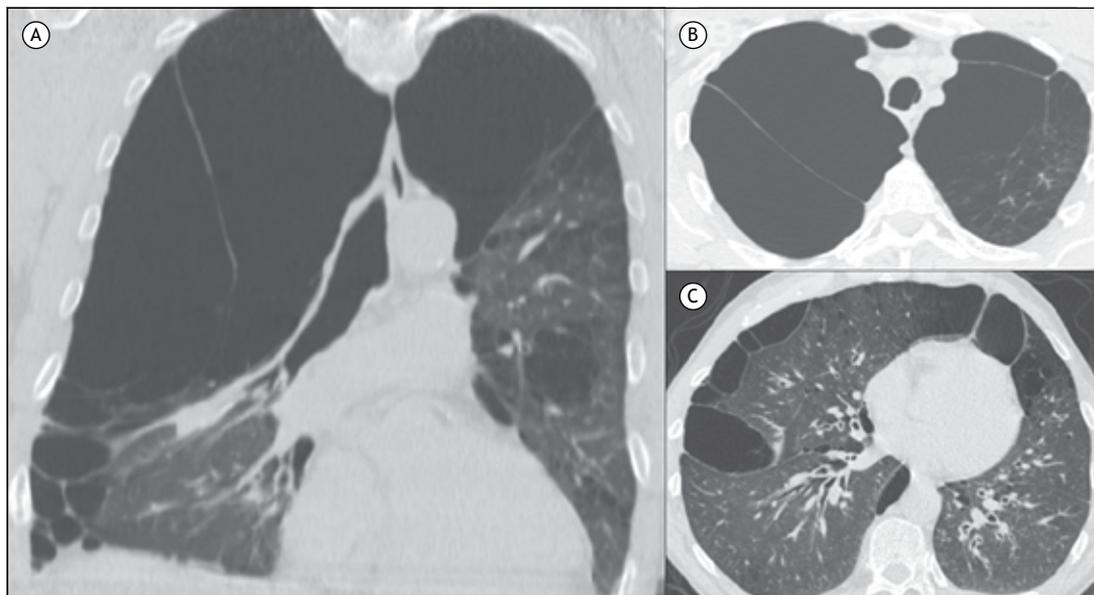


Figure 1. Chest CT scans with coronal (A) and axial (B and C) reconstructions showing large emphysematous bullae predominating in the upper fields of the lungs, the largest one in the right lung.

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