

[PICTURES IN CLINICAL MEDICINE]

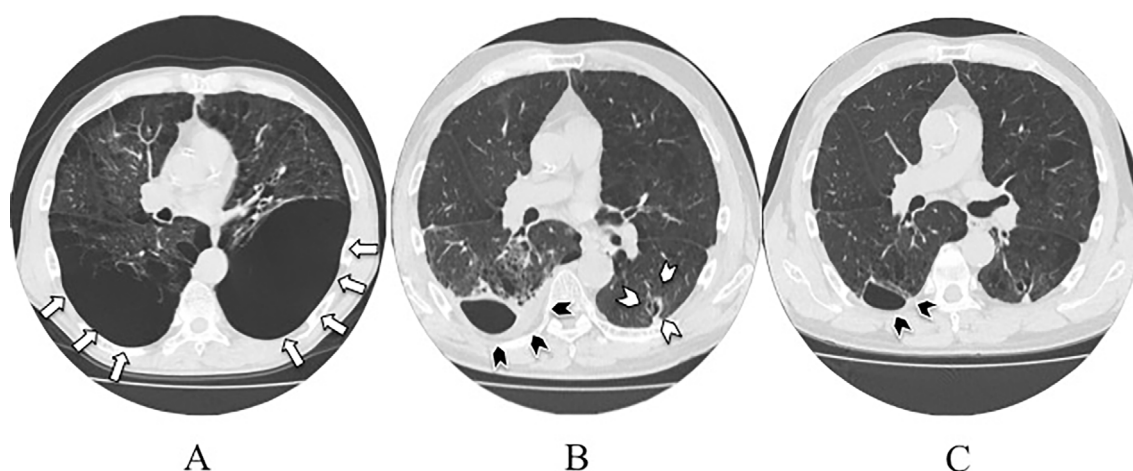
Autobullectomy in a Patient with COPD

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Picture.

A 74-year-old man was referred to our hospital after a 4-year absence to undergo treatment for pneumonia. He had been followed for severe chronic obstructive pulmonary disease with bilateral giant bullae on chest computed tomography (CT) (Picture A). A pulmonary function analysis at that time revealed the following results: forced vital capacity (FVC), 2.87 L (91.1% of predicted); forced expiratory volume in one second (FEV_{1.0}), 1.01 L (46.8% of predicted); and FEV_{1.0}/FVC 35.19%. He said that he had been doing well without respiratory symptoms or treatment, and had not been diagnosed with pneumothorax during these 4 years. The giant bulla in the left lower lobe was completely gone with the re-expansion of the adjacent lung (arrowheads), while that in the right lower lung was markedly smaller than it had been at the previous examination (black arrowheads) (Picture B). Chest CT after 5 months showed a further reduction in the size of the right lower lobe bulla with the disappearance of peribullous consolidation (black arrowheads) (Picture C). The patient's lung function showed a marked

improvement after the autobullectomy [FVC, 3.42 L (118.3% of predicted); FEV_{1.0}, 1.80 L (78.9% of predicted), and FEV_{1.0}/FVC, 52.63%]. The natural course of pulmonary bullae is unpredictable, although gradual enlargement over time is common. In the present case, the patient's airway inflammation might have been associated with the closure of the communication between the airways and the bullae (1).

The authors state that they have no Conflict of Interest (COI).

Reference

1. Byrd RP Jr, Roy TM. Spontaneous resolution of a giant pulmonary bulla: what is the role of bronchodilator and anti-inflammatory therapy? *Tenn Med* **106**: 39-42, 2013.

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