Buffalo Chest Syndrome Following Esophagectomy

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An 81-year-old ex-smoking man who had undergone esophagectomy 1 month earlier developed sudden-onset shortness of breath. Chest computed tomography (CT) revealed bilateral pneumothorax (Picture 1). As the left pleural cavity had more air space than the right, we first inserted a single drainage tube into the left cavity. Chest CT two days later revealed bilateral lung expansion, suggesting buffalo chest syndrome (Picture 2). Buffalo chest syndrome is simultaneous bilateral spontaneous pneumothorax typically caused by interpleural communications due to invasive mediastinal surgery (1, 2). Esophagectomy can cause interpleural connections on chest CT (Picture 1), and pleural metastasis of esophageal cancer and mediastinal abnormalities are differential diagnoses. Rupture of the subpleural bleb on one side leads to unilateral pneumothorax with transit of air through the interpleural connection and development of contralateral pneumothorax. This case is intriguing, since a single drainage session resulted in the continuous expansion of both lungs without additional surgical procedures.

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References


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