

# Case report: Spontaneous bilateral pneumothorax secondary to pulmonary tuberculosis

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## ABSTRACT

**Introduction:** Simultaneous bilateral primary spontaneous pneumothorax is a sporadic presentation found in only one per cent (1%) of all spontaneous pneumothorax. Patients with spontaneous pneumothorax can present as either primary or secondary to another medical illness. **Case Description:** A 64-year-old Chinese lady with a known case of hypertension and non-smoker presented with worsening shortness of breath for one week associated with dry cough and pleuritic chest pain without a history of fever, night sweats, or active tuberculosis contact. She was in severe respiratory distress, drowsy, and hemodynamically unstable on initial presentation. Her lung auscultation was silent chest bilaterally. Her blood investigations were only significant for serum leucocytosis. Chest radiograph demonstrated bilateral large pneumothorax (>2cm). Emergent bilateral chest tubes were placed, and chest radiograph post-chest tube insertion showed good lung re-expansion. High-resolution computed tomography (HRCT) Thorax was reported as bilateral pneumothorax with no CT evidence of bronchopulmonary fistula. Pleural fluid was noted to be exudative with elevated adenosine deaminase (ADA). Thus, the patient was treated as smear-negative pleural tuberculosis (TB). The chest tube tubes were removed on day eleven and day twelve of admission, respectively, with a resolution of the pneumothorax. **Conclusion:** The patient had bilateral spontaneous pneumothorax as a rare initial presentation of TB. Spontaneous pneumothorax secondary to TB is usually associated with empyema, cavitary lung formations, and bronchopleural fistula. The mycobacterium bacteria will invade the pleural lining. The consequent liquefactive necrosis will cause pleural rupture and spontaneous pneumothorax. It is recommended that all patients presenting with spontaneous pneumothorax be screened for TB.