CLINICAL SNAPSHOT

A Rare Differential Diagnosis of Tension Pneumothorax

An undernourished and dehydrated 3-year-old Malawian boy who was known to have tuberculosis was brought to us during the rainy season with diarrhea and fever. We found absence of breath sounds, an extremely sonorous percussion sound on the left, 40 breaths/min and 88% saturation. The patient's pulse was 120/min and his blood pressure 75/45. The appearance on chest radiography (*Figure*) suggested left-sided tension pneumothorax, and a thoracic drain was inserted immediately. Only a minimal amount of air was removed by drainage, pneumothorax was still detected, and the vital signs remained unchanged. However, the situation was swiftly improved by volume substitution. Although the initial clinical and radiological findings had seemed clear, there had plainly been no tension pneumothorax after all. The latter had been mimicked by the residual signs of an old pneumothorax with distortion of the intrathoracic structures by longstanding tuberculosis, coincidentally accompanied by infectious diarrhea. Resolution of the pneumothorax required further suction drainage for a number of weeks.

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The chest radiograph shows displacement of the trachea and mediastinum to the right, an abnormally low position of the diaphragm on the left with the internal margin of the cavity also rising medially (making an effusion unlikely), and left pneumothorax with a drain in place.