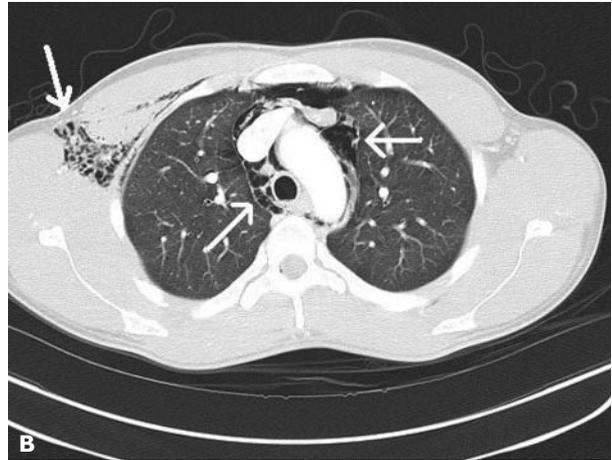
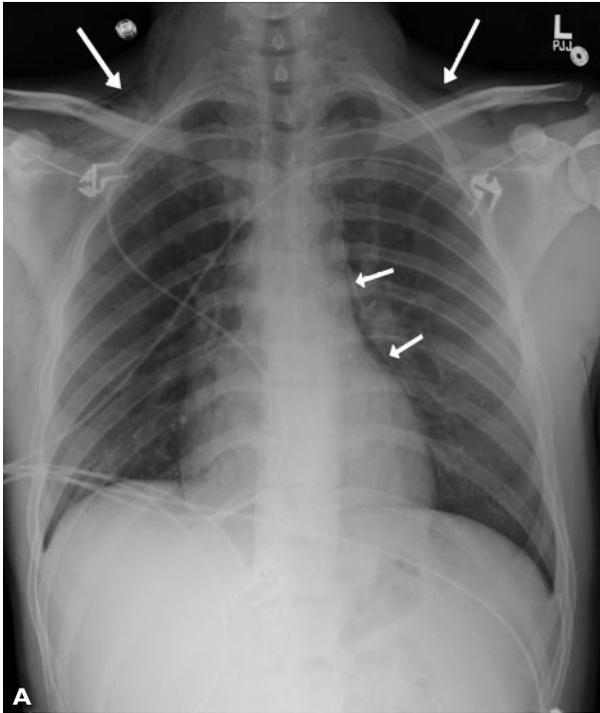


Posttussive Pneumomediastinum

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A 23-year-old man presented to the emergency department (ED) with mild retrosternal pleuritic chest pain that began following a coughing spell during an episode of upper respiratory tract viral infection. The patient was a nonsmoker. On examination, he was in mild distress but hemodynamically stable with normal cardiovascular and chest findings. He was sent home with cough suppressants and oral analgesics. He returned 24 hours later with progressively increasing severe pleuritic chest pain. On examination, his respiratory rate was 29 breaths/min, blood pressure was 130/87 mm Hg, and heart rate was 81 bpm with regular rhythm. Examination was positive for left supraclavicular fossa subcutaneous emphysema. Chest radiograph (**Image A**) showed bilateral supraclavicular soft tissue air (*upper arrows*) as well as a faintly visible left pneumomediastinum lined by pleura (*lower arrows*), which was not initially identified by the ED team. The patient was admitted in order to rule out a remotely

possible pulmonary embolism (PE). Computed tomography (CT) of the chest with PE protocol (**Image B**) showed extensive pneumomediastinum with air tracking into the subcutaneous tissues of the chest (*arrows*). A diagnosis of posttussive pneumomediastinum was considered and the patient was given analgesics and discharged after a day of observation. On follow-up 1 week later, the patient denied any symptoms, and a chest radiograph was normal.

This case highlights an uncommon complication of cough that should be borne in mind in cases of chest pain temporally associated with bouts of cough.¹ Additionally, it reinforces the evidence that CT pulmonary angiography reveals an alternative diagnosis in 11% to 85% of cases of suspected PE and should be the preferred diagnostic modality in a patient with chest pain if PE is considered.² **HP**

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