Lung hernia

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DESCRIPTION

A 60-year-old man presented with worsening right-sided chest pain. Pain was exacerbated by coughing, sneezing and with deep breath. His medical history was significant for chronic obstructive pulmonary disease, and cardiothoracic surgery for resection of 5 cm anterior mediastinal cyst which was benign. At physical exam, he was afebrile and oxygen saturation was 90% on room air. Chest exam was remarkable for mild crackles and tenderness to palpation on the anterolateral side of right chest with no erythema or swelling. Chest x-ray was unremarkable. However, due to severe chest pain, CT of the chest was done which showed seventh right rib bony defect with pulmonary tissue herniation through the ribcage. This was associated with interstitial fibrotic changes in the right middle lobe and evidence of emphysematous changes (figure 1). The patient was admitted to the hospital and underwent thoracic surgery for reduction of the

herniated lung and closure of the bony defect. His postoperative course was uneventful and discharged in stable condition. Lung hernia is extremely rare condition. Most lung hernias are asymptomatic. Patients usually present with a crepitant mass protruding through the chest wall with or without pain.¹ The hernia size is exacerbated with Valsalva manoeuvre or coughing. Lung hernia can develop after cardiothoracic surgery especially if there is incomplete chest wall wound closure, resuming normal activities soon after surgery, or increase in intrathoracic or intra-abdominal pressures (ie, chronic cough).^{2 3}

Learning points

- ▶ Lung herniation could be a cause for chest pain and recurrent infections in patient with previous thoracotomy or trauma.
- ▶ Lung hernias can be missed on routine chest radiography and CT scan is considered the test of choice for diagnosis.
- ▶ Awareness of the clinical and radiological appearance of lung hernia can help clinician differentiating this disease from other conditions such as subcutaneous emphysema, or pneumothorax which require different treatment strategy.

Competing interests None.

Patient consent Obtained.

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Figure 1 CT scan of the chest showing seventh right rib bony defect with pulmonary tissue herniation through the ribcage.

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