A 56-year-old female with non-significant past medical history was admitted with 1 day history of non-specific chest pain and shortness of breath. Posteroanterior and lateral chest images (Fig 1a-b) and subsequent chest computed tomography were performed (Fig 2a-d). The extrapulmonary posteroanterior mediastinal mass showed fluid attenuation coefficient of 14 CT units. The rest of the complete workup was totally unremarkable. The patient was then taken to surgery and the mass was resected via a right posterolateral thoracotomy.

Fig 3a. Immediate post-operative chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 3b. 10 hrs post-operative status. Patient developed fever of 100.3°F, leukocytosis and cough, associated with pleuritic opacity, tachycardia, tachypnea or respiratory distress. Based on the available clinical and radiological findings: can you suggest the diagnosis?

Fig 3c. 24 hrs. post-operative status. Patient developed pleural effusion and fever of 101.1°F.

Fig 3d. 7b torsion (clockwise from observer’s perspective). 

Conclusions: Lung torsion. 

Fig 4a. 2006; 8: 97-100. Observations on the inferior pulmonary ligament can be a probable bridge between contiguous lobes. 

Fig 4b. 2001; 47: 611-18. Intraparenchymal hemorrhage and abundant free fluid in the chest cavity. Upper and middle lobes were not salvageable or later resected via a right posterolateral thoracotomy.

Case of the Day #2
Lung Torsion
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Lung torsion is a rare but life-threatening complication in thoracic surgery, which if unnoticed can result in bronchial obstruction and gangrene.

The authors experienced a case of bi-lobar torsion. The patient, a 56-year-old female with non-specific chest pain and shortness of breath, underwent posteroanterior and lateral chest images (Fig 1a-b) and subsequent chest computed tomography. The extrapulmonary posteroanterior mediastinal mass showed fluid attenuation coefficient of 14 CT units. The rest of the complete workup was totally unremarkable. The patient was then taken to surgery and the mass was resected via a right posterolateral thoracotomy.

A 56-year-old female with non-significant past medical history was admitted with 1 day history of non-specific chest pain and shortness of breath. Posteroanterior and lateral chest images (Fig 1a-b) and subsequent chest computed tomography were performed (Fig 2a-d). The extrapulmonary posteroanterior mediastinal mass showed fluid attenuation coefficient of 14 CT units. The rest of the complete workup was totally unremarkable. The patient was then taken to surgery and the mass was resected via a right posterolateral thoracotomy.

Fig 1a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 1b. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 1c. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 1d. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 2a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 2b. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 2c. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 2d. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 3a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 3b. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 3c. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 3d. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 4a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 4b. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 4c. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 4d. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 5a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 5b. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 5c. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 5d. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

INTRODUCTION

- Pulmonary torsion is a rare but life-threatening complication in thoracic surgery, which if unnoticed can result in bronchial obstruction and gangrene.
- The authors experienced a case of bi-lobar torsion following the removal of a chronic obstructing bronchogenic cyst, which required resection of the affected lobe and led to a final resection.
- The rarity of the condition, the possible complications when the diagnosis is not confirmed, and the required treatment make it a critical situation that must be addressed.
- Despite the lack of a single case report, the condition has been reported in the literature.

LUNG TORSION

- Constrictive ring on pulmonary lobes, as the result of torsion. Can occur spontaneously or after surgery.
- Symptoms: Tachycardia, shortness of breath, cough, fever, hypotension, and tachypnea.
- Therapy: Detorsion and drainage of the affected lung parenchyma.
- The benefit of surgery has been emphasized.

Fig 6a. Immediate post-operation chest radiograph. Patient in satisfactory condition. Final histologic diagnosis: benign endothelial lined cyst.

Fig 6b. 13 days post-operation. Patient had sustained multiple complications and died two days later.

Fig 7a. Right upper lobe. A known subendocardial hemangioma as a result of hemorrhage: infection. The section shows intravascular thrombus.

Fig 7b. Right middle lobe. A known subendocardial hemangioma as a result of hemorrhage: infection.