A very vascular right hemithoracic opacity

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Case presentation

A 78-year-old lady with a history of hypertension presented to the emergency department (ED) with complaints of chest pain and shortness of breath. On physical examination, her heart rate was 110/min, blood pressure 70/40 mmHg, respiratory rate 28/min, oxygen saturation while breathing room air of 88%. Supplemental oxygen was provided and intravenous access attempted peripherally. Placement of central venous line utilizing the anterior approach of jugular vein cannulation was complicated by difficulty in threading the guide wire. An immediate portable upright chest radiograph revealed right lung collapse associated with pleural effusion and a 9 cm opacity on the left hemithorax (Figure 1). A computed tomography (CT) scan of the chest revealed a very large thoracic aortic aneurysm (starting at the aortic arch), along with another large aneurysm involving the distal descending thoracic aorta (Figures 2 and 3). Emergency bronchoscopy revealed mild mucous plug in right lung with extrinsic compression of the lung.

Key words: Aortic aneurysm, chest radiograph, lung opacity, vascular, pleural effusion, atelectasis.

Figure 1. Chest radiograph reveals complete opacification of the right lung, with a large opacity in the left hemithorax

Figure 2. Computed tomography (CT) scan of the chest depicts aneurysmatic dilatation of the ascending aorta with collapse of the right lung and an associated pleural effusion

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Figures 3. CT scan of chest shows displacement of the heart in right hemithorax with collapse of lung and a very large aneurysm of descending thoracic aorta in left hemithorax.