A Case in Which His Own Pancreatic Juice Damaged a Patient’s Lungs through a Pancreaticopleural Fistula

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Clinical Image

A 42-year-old man was admitted with chest pain and bloody sputum. Chest Computed Tomography (CT) showed right effusion and consolidation with ground-glass opacity in the right lower lobe (Figure 1A, 1B). After one month, chest CT showed right hemopneumothorax and severe right lower lung destruction. The destruction of the right lower lobe had progressed to the immediate vicinity of the pulmonary artery, suggesting a high risk of massive bleeding (Figure 1C).

The amylase concentration in the pleural effusion was extremely high (43,900 IU/L).

Severe lung destruction due to pancreatic juice leakage associated with a Pancreaticopleural fistula was diagnosed according to these medical imaging findings. We subsequently performed Right Lower Lobectomy (RLL) to prevent bleeding. After the operation, a pancreatic stent was placed in the main pancreatic duct endoscopically.

The risk of fatal bleeding in this patient was high; however, RLL and pancreatic duct stent placement resulted in a good outcome.

Figure 1: 1A: No pleural effusion or lung destruction was observed in chest CT examination before onset. 1B: A chest computed tomography scan showing right effusion and consolidation with ground-glass opacity in the right lower lobe. 1C: A chest computed tomography scan showing right hemopneumothorax and severe right lower lung destruction. The destruction of the right lower lobe had progressed to the immediate vicinity of the pulmonary artery, suggesting a high risk of massive bleeding.