Torsion of Right Middle Lobe after Pulmonary Resection: Report of a Case

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Lobar torsion is a rare complication after pulmonary resection. We report a case of such a complication after right upper lobe resection for adenocarcinoma of the lung. A 60-year-old female patient underwent a right upper lobe lobectomy for her pulmonary malignancy. On postoperative day 1, a chest radiograph (CXR) revealed an abnormal rounded opacity in the right upper lung field. Chest computed tomography (CT scan) disclosed an atelectatic right middle lobe. Torsion of the right middle lobe was suspected. Immediately, the patient underwent a re-thoracotomy. Right middle lobe torsion was found. Reduction was tried, but failed. A right middle lobe lobectomy was therefore performed. The postoperative course was unremarkable and the patient was discharged without further problems.

Both the postoperative CXR and chest CT scan are very important for the diagnosis of lobar torsion. For right middle lobe torsion, early diagnosis and prompt management with lobectomy is crucial to avoid mortality and morbidity.

Key words: torsion of right middle lobe

Lobar torsion represents a difficult diagnostic problem in the early postoperative period after pulmonary resection. The incidence of torsion of the right middle lobe has been reported to be approximately 0.089%. The main causes of lobar torsion include pulmonary resection, trauma and intrathoracic anomaly. A few rare cases after lung transplantsations and transthoracic needle biopsy have also been reported. In most of the reported cases, lesions were located in the right middle lobe, while other lobes also have been involved. We present a 60-year-old female with right middle lobe torsion after pulmonary resection for lung malignancy.

Case Report

A 60-year-old female, who had undergone a modified radical mastectomy on the left 10 years previously for her breast cancer was admitted to our hospital for right upper lobe lung cancer. A posterolateral thoracotomy was performed through the 5th intercostal space. There was no pleural seeding. A 3-cm tumor in the right upper lobe was identified. A complete major fissure between the right middle and right lower lobes was noted. A right upper lobectomy with mediastinal lymph node dissection was carried out smoothly. Full expansion of both the right middle and lower lobes was noted before the thoracotomy wound was closed. An immediate postoperative chest radiograph (CXR) disclosed full expansion of the right middle and right lower lobes (Fig 1). On postoperative day 1, another CXR revealed an abnormal rounded opacity in the right upper lung field (Fig 2). Computed tomography (CT scan) confirmed right middle lobe torsion with atelectasis (Fig 3). An immediate thoracotomy was performed. During the operation, torsion and infarction of the right middle lobe was noted. The rotation of the right middle...