



**Authors: Roberta Muniz Marques (MARQUES, RM), Jaqueline Schaparini**

**Fonini (FONINI, JS),**

**Alessandro Wasun**

**Mariani (MARIANI, AW)**

**Title: Torsion of the middle lobe of the lung: case report**

**Introduction** Pulmonary torsion occurs when the lung or its lobes twist on its own axis. It is a rare condition and is associated with changes in the homeostasis of the thoracic cavity. Common causes are lung transplantation, thoracostomy, trauma, spontaneous.

**Case report:** AS S, male, 56 years old, reports cough with expectoration hemoptysis, daily fever and chest pain, located in the posterior thorax, worsening deep ventilation for a month and a case of major hemoptysis.

Hypertensive, insulin-dependent diabetic, cirrhotic, coronary artery disease, kidney disease chronic non-dialysis patient. Surgical history of thoracoscopy six years ago mediastinitis and videolaparoscopic cholecystectomy two months ago. On physical examination had decreased vesicular murmurs in the middle third of the chest on the right. A computed tomography (CT) scan of the chest was performed, showing consolidation in the apical segment and excavated foci in the right lower lobe, delimited by the accessory fissure, with obliteration of the respective bronchus segmental. This finding is suggestive of a parenchymal infectious process, such as necrotizing pneumonia. In a new CT scan performed twenty days later, it was possible to note the torsion of the right middle lobe and progression of the areas previously excavated and consolidated. Therefore, in addition to clinical treatment, the patient was

underwent middle lobectomy. Ten days after the surgical procedure, the patient showed improvement in the clinical and infectious condition. He was discharged from hospital with outpatient follow-up.

**Discussion** Pulmonary torsion is a low incidence entity 0.089% - 0.3%. Even though it has a low incidence, it is a condition that, if not identified and managed if done correctly, it can progress rapidly and result in death. The middle lobe The right side is the most common site for torsion to occur, accounting for 29.4% of cases after thoracic surgery, as is the case in this report. (1) There are some factors of risk that can lead to this morbidity such as thoracic trauma, abdominal trauma, thoracentesis, thoracotomy, thoracoscopy and spontaneous causes. The patient with Pulmonary torsion may present with dyspnea, chest pain, fever, and cough or may remain asymptomatic. Therefore, it is necessary to perform a diagnosis differential with other thoracic pathologies, including carrying out tests complementary tests such as chest computed tomography and bronchoscopy. The recommended treatment is lobectomy of the affected segment, as performed successfully in this case report. There are studies reporting that if the affected site is viable and the surgical procedure is performed quickly, it is possible perform the distortion without performing a lobectomy, but this procedure is less used due to the complications that it may cause post-operatively. (2,3)

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