Clinical Image

Torsion of Middle Lobe After Lobectomy. Correlation Between Optical Bronchoscopy-Computed Tomography Virtual Bronchoscopy

Torsión del lóbulo medio poslobectomía. Correlación de broncoscopia óptica-broncoscopia virtual con tomografía computarizada

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Fig. 1. Extensive consolidation of the middle lobe can be observed, containing air bubbles (A), and distortion of the right bronchial anatomy (B). Correlation between virtual reconstruction and optical bronchoscopy showing tapering of the airway lumen of the middle lobe bronchus (C and D).

Torsion of the middle lobe following lobectomy is a serious and rare complication with a high mortality rate if not treated promptly (Fig. 1).

We present the case of a 56-year-old patient with a nodule in the right upper lobe (RUL) with malignant characteristics. Following right upper lobectomy, he presented frank hemoptysis and tachycardia, with persistent pulmonary opacity on X-ray. Contrast-enhanced multidetector computed tomography (MDCT) showed extensive consolidation of the middle lobe with absence of enhancement, distorted perihilar bronchi, and alteration in the normal position of pulmonary vasculature. Virtual bronchoscopy showed obliteration of the middle lobe bronchial lumen. Optical bronchoscopy revealed a compressed bronchus with a “fish mouth” appearance, which prevented introduction of the bronchoscope. Torsion and infarction of the middle lobe were suspected, and an urgent middle lobectomy was performed, which confirmed the diagnosis.

The torsion was caused by partial or complete rotation of the hilum, with airway obstruction and vascular compromise that can result in a hemorrhagic infarction if not diagnosed promptly. It presents most often in complete oblique fissures, so pneumonectomy is recommended.

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Conflict of Interest

The authors state that they do not have any conflicts of interest directly or indirectly related with the contents of the manuscript.

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