Respirology Case Reports OPEN CACCESS





Accessory V⁶ during thoracoscopic middle lobectomy: "an uncomfortable presence"

Dario Amore¹, Roberto Scaramuzzi¹, Dino Casazza¹, Pasquale Imitazione², Emanuele Muto³ & Roberta Lieto³

Kevwords

Lung cancer, lung injury, thoracic surgery.

Correspondence

Dario Amore, Department of Thoracic Surgery, Monaldi Hospital, 1 Leonardo Bianchi St, 80131 Naples, Italy. E-mail: dario.amore@alice.it

Received: 21 April 2020; Revised: 14 May 2020; Accepted: 1 June 2020; Associate Editor: Michael Hsin

Respirology Case Reports, 8 (6), 2020, e00601

doi: 10.1002/rcr2.601

Key message

The identification of the accessory vein draining the superior segment of the right lower lobe (accessory V⁶), during the posterior mediastinal lymph node dissection, can help avoid operative complications.

Clinical Image

A 78-year-old man was admitted to our unit for surgical treatment of non-small cell lung cancer (NSCLC) arising from the middle lobe (Fig. 1A). A thoracoscopic middle lobectomy was performed by a standardized three-port anterior approach. During the surgical procedure, the posterior mediastinal pleura was divided and a supernumerary venous branch draining the superior segment of the right lower lobe into the left atrium (accessory V⁶) was accidentally discovered near the level 7 nodal packet (Fig. 2A). The vein was preserved (Fig. 2B) and required a careful mediastinal lymph node dissection to avoid annoying operative bleeding due to vessel injury and blood flow from the left atrium. The anomalous vessel was retrospectively identified on chest computed tomography (CT) scan (Fig. 1B, C).

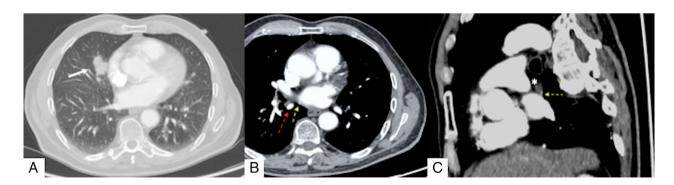


Figure 1. Chest computed tomography (CT) scan. (A) Lung cancer located in the middle lobe (white arrow). (B) Mediastinal window image shows vein (red arrow) and accessory vein (accessory V⁶) (yellow arrow) draining the superior segment of the right lower lobe. (C) Sagittal multiplanar reconstructed (MPR) projection shows accessory V⁶ (yellow arrow) adjacent to mediastinal lymphadenopathy (white asterisk).

¹Department of Thoracic Surgery, Monaldi Hospital, Naples, Italy.

²Department of Respiratory Diseases, Monaldi Hospital, Naples, Italy.

³Department of Diagnostic Imaging, General Radiology, Monaldi Hospital, Naples, Italy.

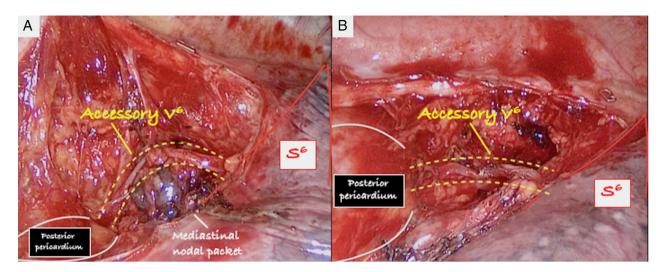


Figure 2. Intraoperative view during mediastinal lymph node dissection. (A) Accessory vein (accessory V^6) draining the superior segment of the right lower lobe (S^6) into the left atrium, displaced by posterior mediastinal lymph nodes. (B) Course of the accessory V^6 along the posterior mediastinum after lymph node exeresis.

Disclosure Statement

Appropriate written informed consent was obtained for publication of this case report and accompanying images.