

Clinical Image

Intraoperative diagnosis of partial anomalous pulmonary venous return during pulmonary resection surgery in a non-small cell lung cancer patient*

Diagnóstico intraoperatorio de drenaje venoso pulmonar anómalo parcial durante cirugía de resección pulmonar en paciente con diagnóstico con carcinoma no microcítico de pulmón

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We report the case of a 68-year-old patient diagnosed with squamous lung carcinoma undergoing left pneumonectomy. Intraoperatively, during the dissection of the main pulmonary artery (MPA), a large-caliber vessel from the left upper lobe was observed straddling the left MPA and ascending through the mediastinal fat anterior to the aortic arch. A CT scan of the pulmonary arteries performed during the preoperative period was reviewed, and a partial anomalous pulmonary venous return (PAPVR) from the upper left pulmonary vein (PV) toward the left brachiocephalic venous trunk was visualized; it was sectioned with an Endostapler and the pulmonary resection surgery was completed. Volumetric reconstruction was requested which confirmed the intraoperative finding. In PAPVR, 1 or more lobes drain to the right atrium or one of its tributaries. Prevalence is 0.4%–0.7%, and the most frequent anomaly is from the right PV to the superior vena cava; it is usually an incidental finding, the presence of symptoms being exceptional¹. In our case, we observed the drainage of the left upper PV to the left brachiocephalic venous trunk, which has a vertical course (Fig. 1). The availability of preoperative volumetric vascular reconstruction aids surgical planning and diagnosis of pulmonary vascular abnormalities².

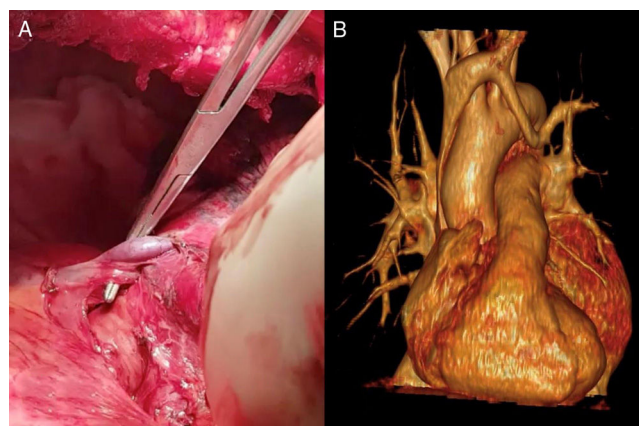


Figure 1. A. Partial anomalous pulmonary venous return (PAPVR) straddling the left main pulmonary artery. B. Volumetric reconstruction of left pulmonary vessels showing the PAPVR draining into the left brachiocephalic trunk.

References

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