ABNORMAL ANATOMY DURING UNIPORTAL VATS

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Abnormalities

- Azygos lobe
- Pulmonary sequestration
- Situs inversus
- Atresia (bronchial, vascular)
- Anomalous vein, artery or bronchus
- Common vascular trunk
- Aberrant Cava Vein
- Abnormal location of azygos vein
- Abnormal vein or artery in the fissure
- Variations in anatomy during segmentectomies
CASE REPORT

Lung adenocarcinoma with anomalous bronchi and pulmonary veins preoperatively identified by computed tomography

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Abstract

During the treatment of 41 patients with video-assisted thoracoscopic surgery (VATS) anatomical resection (include segmentectomy) within the last two years, we have encountered five patients (12%) with anomalous venous returns. Anomalous venous returns included: (i) common trunk of the left pulmonary veins, (ii) right middle pulmonary vein draining into the inferior pulmonary vein (IPV), (iii) left upper lobe vein draining into the left inferior pulmonary veins, (iv) right middle pulmonary vein draining into the right middle pulmonary veins, and (v) left upper lobe vein draining into the right inferior pulmonary vein. A preoperative thoracic computed tomography (CT) was performed for all patients. Three-dimensional volume-rendered imaging (3D VR) of the thorax was helpful in identifying the anatomical variations. VATS and open surgery can be used for patients with such variations. VATS is less invasive, allows for a better cosmetic outcome, and improves the patient's quality of life. VATS is a good choice for patients with such anatomical variations. VATS is a useful tool in the diagnosis and management of patients with such anatomical variations. VATS is a less invasive procedure and allows for a better cosmetic outcome.

Keywords: VATS; Thoracic computed tomography; Anomalous venous returns.

Confirmation of a Variant Lingular Vein Anatomy during Thoracoscopic Surgery

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Variations in pulmonary veins can have a serious effect on patients undergoing lung surgery. But few clinicians are familiar with patients who have these variations, and few have been reported in the left pulmonary vein. We report the case of a lung cancer patient with a variant anatomy in the inferior segment of the lingular vein (V6) that drained into the left inferior pulmonary vein. A preoperative review of the patient's three-dimensional 64-row multidetector computed tomography (3D MDCT) imaging showed that the variant vein (V6) was draining from the inferior lingular segment into the upper side of the inferior pulmonary vein, which was also observed on conventional CT films. This variant anatomy was confirmed during a thoracoscopic left upper lobectomy. Furthermore, the superior segment (V5) of the inferior pulmonary vein drained into the basal part of the inferior pulmonary vein, but not into the superior side where V6 in this patient was drained. The postoperative course was uneventful, and the patient was discharged on postoperative day 10. Preoperative 3D MDCT imaging was helpful in identifying these anatomical variations.
Prevention of complications!!
Azygos lobe
Pulmonary sequestration
Situs Inversus (right side)
Situs Inversus (left side)
Segment 6 atresia (vascular and bronchial)
Abnormal Vena cava left side
Subxiphoid approach

RUL with tracheal bronchus
RUL independent segmental bronchus
Abnormal bronchus and vein
Aberrant Posterior Vein
Lingular vein from LLL vein
Posterior veins above bronchus (RUL)
Additional A6 and A2 common trunk
Upper vein from Vena cava (RUL)
Anormal location of RUL Vein
Common trunk Vein (LUL and LLL)
Isolated S6 vein
Abnormal artery in the fissure (LUL)
Abnormal vein in the fissure (RUL)
Abnormal artery RLL
Complex anatomic segmentectomy S1+S2
(Tuberculosis)
Abnormal anatomy
Complex anatomic segmentectomy S1+S2 (Tuberculosis) - Abnormal anatomy
Abnormal Thymic artery and thymic vein
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