

A dilated left superior intercostal vein misdiagnosed as aortic dissection

Aort diseksiyonu ile karışan dilate sol superior interkostal ven

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The left superior intercostal vein arises from the left second, third, and fourth intercostal veins courses anteriorly along the lateral wall of the aortic arch, and drains into the left innominate vein. Sometimes, it may communicate with the accessory hemiazygos vein.^[1] Dilatation of the left superior intercostal vein can be congenital or acquired. The absence of the inferior vena cava, Budd-Chiari syndrome, superior or inferior vena cava obstruction, hypoplasia of the left innominate vein, congestive failure, or portal hypertension may lead to the dilatation of the left superior intercostal vein.^[2] The differential diagnosis of a dilated left superior intercostal vein includes mediastinal masses, lymphadenopathy, and aneurysms or dissection of the aorta.^[3]

A 44-year-old male was referred with a thrombus on his left common carotid artery which was detected through cervical computed tomography. He had a history of parotid gland resection and presented with a left-sided craniofacial tumor and multiple

metastases on his both lungs. On admission, his vital signs were stable, biochemical and other he physical examination findings were normal. A dilated left superior intercostal vein was detected on computed tomography, which could be misdiagnosed as the dissection of the aortic arch (Figures 1, 2). Carotid artery Doppler ultrasound, however, revealed no peculiarity for stenosis or a thrombus. We considered that the thrombus, which was detected on previous computed tomography, was dissolved, and the possible cause of the dilated left superior intercostal vein was congenital. Prophylactic anticoagulant treatment was initiated (low-molecular-weight heparin, subcutaneously, twice a day) and we recommended follow-up.

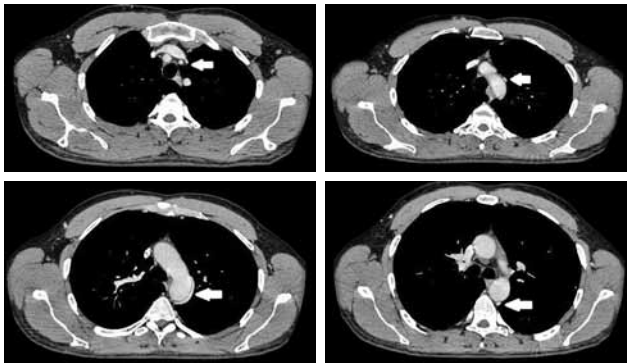


Figure 1. Computed tomography image showing a dilated left superior intercostal vein.

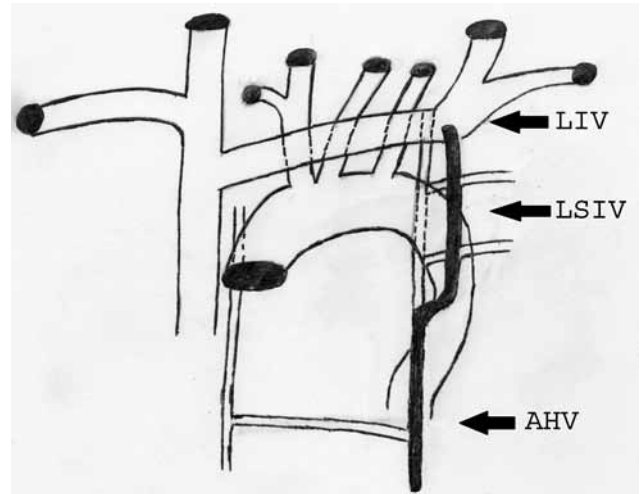


Figure 2. A diagram of the left superior intercostal vein draining into the left innominate vein and accessory hemiazygos vein.

LIV: Left innominate vein; LSIV: Left superior intercostal vein; AHV: Accessory hemiazygos vein.



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About 75% of the left superior intercostal veins communicate with the accessory hemiazygos vein which drains between left fifth and eight posterior intercostal veins.^[3] The left superior intercostal vein may become the tributary of the persistent left superior vena cava. If the diameter of the left superior intercostal vein exceeds 4.5 mm, it can be easily identified on the upright posteroanterior chest radiograph.

In conclusion, dilated left superior intercostal vein may be easily misdiagnosed as aortic dissection on computed tomography; therefore, computed tomography scans must be carefully examined. Clinicians should also be aware of this venous instance and patients should be investigated for a possible underlying abnormality, when diagnosed.

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