

An isolated persistent left superior vena cava with an absent right superior vena cava in an asymptomatic patient

Asemptomatik hastada izole persistan sol superior vena cava ile birlikte sağ superior vena cava yokluğu

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A 42-year-old male patient was admitted to our cardiology clinic because of atypical chest pain. He did not have any relevant medical history, and his physical examinations and laboratory results revealed no abnormalities. However, transthoracic echocardiography showed a large dilated coronary sinus (Figure 1). After injecting saline into the left antecubital vein, the contrast first seeped into the coronary sinus and then the right atrium. Afterwards, when the right antecubital vein was injected with an agitated saline solution, it seeped into the dilated coronary sinus and then emptied into the right atrium. Hence, we suspected there was a persistent left superior vena cava (PLSVC) with an absent right superior vena cava (RSVC). In order to more obviously illustrate this, computed tomography (CT) was performed, which confirmed our suspicions (Figure 2-4).

The presence of a PLSVC with an absent RSVC is an extremely rare congenital venous anomaly.

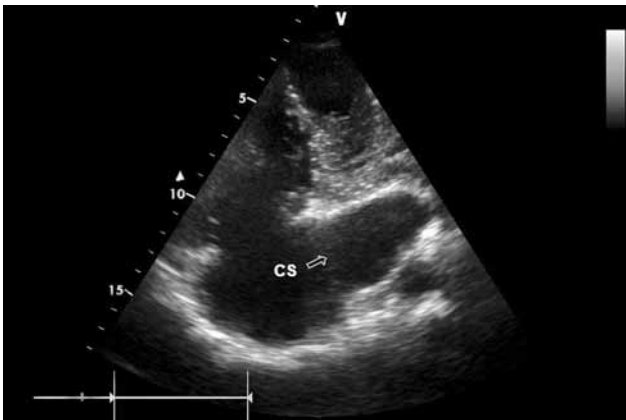


Figure 1. Echocardiogram showing the dilated coronary sinus (CS).



Figure 2. Computed tomographic image showing the right superior vena cava (narrow arrow on the left) joining with the left superior vena cava (thick arrow) and forming the coronary sinus.



Figure 3. Computed tomographic image showing the dilated left superior vena cava (arrow).



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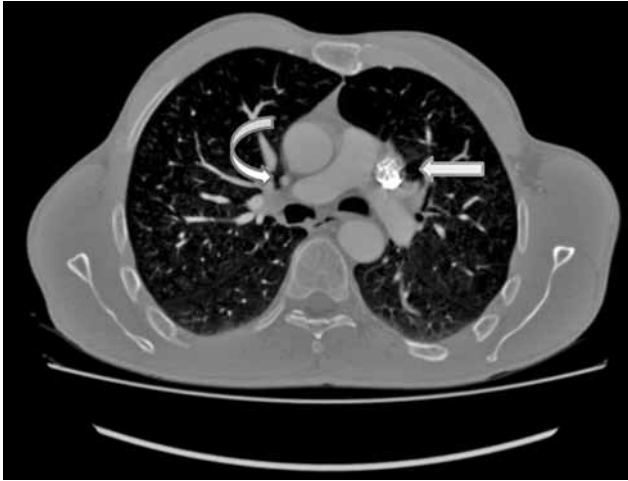


Figure 4. Computed tomographic image showing the absence of the right superior vena cava (curved arrow) and the dilated left superior vena cava (arrow).

Furthermore, PLSVCs are generally asymptomatic and are usually discovered incidentally. Moreover, this condition often has been reported during the placement of a pacemaker and a central venous catheter. Fortunately, because of modern imaging

modalities, such as contrast echocardiography, CT, and magnetic resonance imaging, this anomaly can now be clearly and easily confirmed.^[1-3]

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