

Multimodal imaging of persistent left superior vena cava – case report

- Damir Raljević*,
- ©Karlo Stanić.
- Vesna Pehar Pejčinović,
- Viktor Peršić

Clinic for rehabilitation, treatment and prevention of diseases of the heart and blood vessels, Thalassotherapia Opatija, Croatia **KEYWORDS:** left superior vena cava, imaging.

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*ADDRESS FOR CORRESPONDENCE: Damir Raljević, Thalassotherapia Opatija, M. Tita 188/1, HR-51410 Opatija, Croatia. / E-mail: damir.raljevic@gmail.com

ORCID: Damir Raljević, https://orcid.org/0000-0001-9743-9201 • Karlo Stanić, https://orcid.org/0000-0003-2056-8958 Vesna Pehar Pejčinović, https://orcid.org/0000-0002-8921-7999 • Viktor Peršić, https://orcid.org/0000-0003-4473-5431

The persistent left superior vena cava is a rare vein anomaly and is encountered in 0.3-0.5% of the population, however, as these anomalies are usually asymptomatic, the prevalence is often underestimated. This anomaly is found in 12% of cases with other congenital heart disease. Several anatomical variants of this anomaly are described. In the largest number of cases (80-90%) there are developed both left and right superior vena cava that may differ in size². In the event that both vena cava equally developed, in 65% of cases the development of the left innominate vein is absent and there is no communication between the two superior vena cava. Then the persistent left vena cava drains into the right atrium through the coronary sinus³. In 10-20% cases, the left superior vena cava drains into the left atrium. Also, in 10-20% cases, the right superior vena cava is not developed, and the single left superior vena cava is drained through the coronary sinus into the right atrium³. In the vast majority of cases this anomaly is asymptomatic and goes unnoticed. Clinical relevance is found in the case of the central venous access and the placement of central venous devices, in which case it may be difficult or impossible to set up a central venous device or provoke potentially dangerous right-left shunt and potential thromboembolic incidents. During this presentation we intend to report a case of multimodal imaging of persistent left superior vena cava.

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