

## Partial anomalous pulmonary venous return with sinus venosus atrial septal defect: a case report

Amer Iglica<sup>1\*</sup>,  
Edin Begić<sup>2,3</sup>,  
Indira Melezović<sup>1</sup>,  
Alden Begić<sup>1</sup>,  
Alen Džubur<sup>1</sup>,  
Azra Durak-Nalbantić<sup>1</sup>,  
Buena Aziri<sup>3</sup>,  
Zijo Begić<sup>1</sup>,  
Nadina Jakirlić<sup>1</sup>,  
Fuad Zukić<sup>1</sup>

<sup>1</sup>Clinical Center University of Sarajevo, Sarajevo, Bosnia and Herzegovina

<sup>2</sup>General Hospital "Prim.Dr. Abdulah Nakaš", Sarajevo, Bosnia and Herzegovina

<sup>3</sup>School of Medicine, Sarajevo School of Science and Technology, Sarajevo, Bosnia and Herzegovina

**KEYWORDS:** partial anomalous pulmonary venous return, atrial septal defect, transesophageal echocardiography.

**CITATION:** *Cardiol Croat.* 2023;18(5-6):158. | <https://doi.org/10.15836/ccar2023.158>

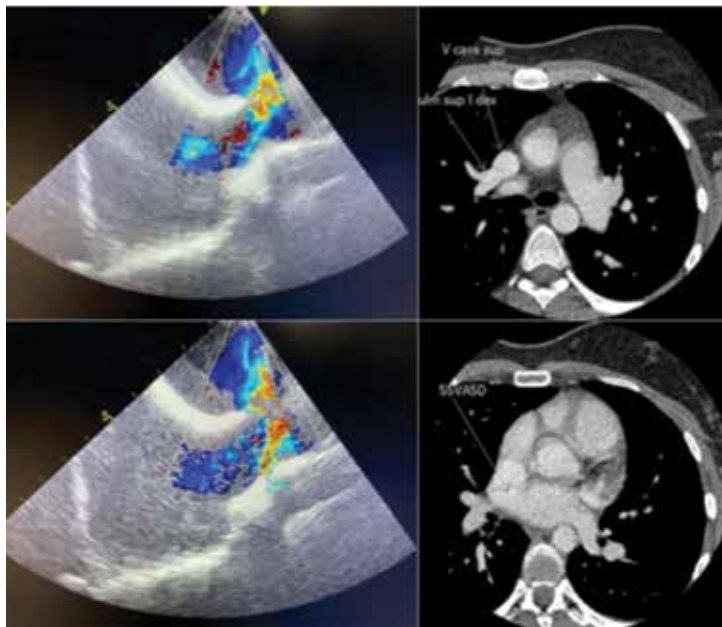
**\*ADDRESS FOR CORRESPONDENCE:** Amer Iglica, Klinički Centar Univerziteta Sarajevo, Bolnička 25, 71000 Sarajevo, Bosnia and Herzegovina. / Phone: +387-62-272-750 / E-mail: [ameriglica@gmail.com](mailto:ameriglica@gmail.com)

**ORCID:** Amer Iglica, <https://orcid.org/0000-0002-4677-8489> • Edin Begić, <https://orcid.org/0000-0001-6842-262X>  
Indira Melezović, <https://orcid.org/0009-0002-3942-062X> • Alden Begić, <https://orcid.org/0000-0002-5374-0892>  
Alen Džubur, <https://orcid.org/0000-0003-1198-540X> • Azra Durak-Nalbantić, <https://orcid.org/0000-0002-5175-8941>  
Buena Aziri, <https://orcid.org/0000-0003-3622-253X> • Zijo Begić, <https://orcid.org/0000-0002-1863-5755>  
Nadina Jakirlić, <https://orcid.org/0000-0003-3294-2142> • Fuad Zukić, <https://orcid.org/0000-0003-0219-0867>

**Goal:** To demonstrate an accidental verification of sinus venosus atrial septal defect (SVASD) associated with a partial anomalous venous inflow of the pulmonary veins (upper right pulmonary veins drain into the superior vena cava).

**Case presentation:** The patient presented for a systematic examination, where the competent physician heard a murmur with an intensity of 2 out of 6, according to Levine, over the precordium and was referred to transthoracic echocardiography (TTE), verifying enlargement of the right ventricle (basal 4.3 cm, TAPSE 21 mm), right atrium (5.3 cm), with moderate tricuspid regurgitation and right ventricular systolic pressure (RVSP) 55 mmHg, as well as a positive bubble test (right ventricular outflow tract (RVOT) 25 mm, RVOT velocity time integral (VTI) 42.1 cm, left ventricular outflow tract (LVOT) 20 mm, LVOT VTI-Qp/Qs ratio 2.53). A TEE was performed, which revealed sinus venosus atrial septal defect (SVASD) with a diameter of 6 mm, and then computed tomography (CT) angiography of the heart, with verification of partial anomalous pulmonary venous return (PAPVR) (**Figure 1**).

**Conclusion:** In the case of enlargement of the right cavities, it is imperative to find the cause of the same, with the gold standard in the form of TEE<sup>1,2</sup>. SAVSD is a rare adult congenital heart disease, and the diagnosis itself must be accompanied by the findings of computed tomography of the heart, in order to analyze the existence of vascular anomalies.



**FIGURE 1.** Sinus venosus atrial septal defect with partial anomalous pulmonary venous return.

RECEIVED:  
March 7 2023

ACCEPTED:  
March 29, 2023



### LITERATURE

1. Riahi M, Forte MNV, Byrne N, Hermuzi A, Jones M, Baruteau AE, et al. Early experience of transcatheter correction of superior sinus venosus atrial septal defect with partial anomalous pulmonary venous drainage. *EuroIntervention.* 2018 Oct 20;14(8):868-876. <https://doi.org/10.4244/EIJ-D-18-00304>
2. Vodusek Z, Khaliqina S, Borz-Baba C, Scandrett R, Vodusek Z, Khaliqina S, et al. Sinus Venosus Atrial Septal Defect: A Challenging Diagnosis. *ureus.* 2019 Oct 17;11(10):e5936. <https://doi.org/10.7759/cureus.5936>