

Persistent left superior vena cava with almost complete anomalous pulmonary venous connection and atrial septal defect mimicking Eisenmenger's syndrome in an adult symptomatic female patient

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Partial anomalous pulmonary venous connection (PAPVC) is a rare congenital cardiac anomaly in which a few of the pulmonary veins connect to the right atrium or its tributaries instead of the left atrium. The PAPVC to the superior vena cava (SVC) occurs in about 10% to 15% of all patients with atrial septal defect (ASD). Approximately 10% have a secundum ASD associated with this anomaly.

We report a 54-year old female patient with an acute inferior myocardial infarction with ST segment elevation (STEMI). After cardiac catheterization and echocardiography we found significantly elevated pulmonary artery pressure, secundum ASD and high suspicion of Eisenmenger's syndrome. According to multislice computed tomography (MSCT) and magnetic resonance imaging (MRI), it was diagnosed an PAPVC connected through persistent left superior vena cava into the innominate vein and right atrium, associated with secundum ASD. Invasive measurements also confirmed partial anomalous pulmonary venous connection to the PLSVC, that drains to right atrium, and of lower oxygen saturation between the atria at the secundum defect, providing oxygenated blood to the left atrium only from the right atrium.

The development of complications depends on how many pulmonary veins return to the right atrium. The special feature of the clinical presentation and hemodynamic characteristics of 54 year old female patient with PAPVC suffered myocardial infarction and reversal of shunt. Due to confirmation that pulmonary hypertension was vasodilator responsive, excluding the Eisenmenger's syndrome patient was referred to cardiac surgery in experienced center to evaluate possibilities for total surgical repair of the TAVC, especially outweighing the risk and benefits.

KEYWORDS: total anomalous venous connection, persistent left superior vena cava, Eisenmenger's syndrome, acute myocardial infarction.

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