**UNROOFED CORONARY SINUS AND PERSISTENT LEFT SUPERIOR VENA CAVA: LATE ONSET SYMPTOMS POST-SURGICAL CORRECTION**

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Unroofed coronary sinus (UCS) is an abnormal communication of the coronary sinus and the left atrium and represents < 1% of atrial septal defects (ASD). It is often associated with a persistent left superior vena cava (PLSVC) or other complex congenital heart lesions. A PLSVC abnormally drains the internal jugular vein into the coronary sinus and left atrium, and the presence of an UCS provides a left-to-right or right-to-left shunt. Patients may present with cyanosis, hypoxia, paradoxical emboli, heart failure, arrhythmias or they may be completely asymptomatic. They Commonly manifest early in childhood and surgical correction is the mainstay of treatment.

We report a case of a female with congenital UCS, PLSVC, and a VSD who underwent successful closure of the septal defects and ligation of the PLSVC at age 5. She presents at the 50th decade of life with dyspnea on exertion and desaturation on ambulation. An echocardiogram revealed mild left ventricular dysfunction and moderate mitral regurgitation. Her coronary catheterization revealed normal coronary arteries, and mild pulmonary hypertension. A CT angiogram of her chest revealed that her PLSVC to left atrial ligation had recanalized. Ultimately, the patient underwent transcatheter closure of the lesion with a vascular plug and was anticoagulated for 6 months post-procedurally to reduce the risk of venous thromboembolism. The patient returns a year from correction with resolution of symptoms and return to baseline functional status. A repeat echocardiogram shows only mild mitral regurgitation and normal biventricular function.

This unique case highlights the clinical presentation of complications following surgically corrected PLSVC. In adulthood, the differential of cardiovascular disease is broadened and a high index of suspicion is crucial. The choice of imaging modality included in the work-up can play a role in early diagnosis. Closure of the lesion with vascular plugs can provide successful outcomes.