A 58-year old man was transferred because of repetitive attacks of tachyarrhythmia and crescendo angina pectoris. Electrocardiogram during attack showed paroxysmal supraventricular tachycardia with down slope ST depression. After emergent PCI, catheter ablation was performed. We could not insert the electrode catheter to coronary sinus, and delayed phase of CAG showed sinus orifice atresia and coronary venous flow to innominate vein via left superior vena cava. We successfully blocked left-sided concealed accessory pathway with trans-septal approach. Asymptomatic venous anomaly sometimes results in complication of cardiac surgery, device implantation and catheter ablation. The hemodynamic circuits should be precisely recognized before and during these procedures.

**Keywords:** CS orifice atresia, PLSVC, WPW syndrome