

Venous Stent Migration to the Heart: Case Report and Review of the Literature

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Background: Venous stent migration (VSM) to the heart is considered a rare complication. Several case reports and case series have documented this event. A large percentage of reported cases were asymptomatic and discovered incidentally; additionally, there is no standardized database tracking stent migration occurrences. Therefore, the true incidence of VSM is likely higher than thought. Diagnosing this complication is obfuscated by its general presentation, which can include dyspnea, chest pain and arrhythmia. The diagnosis is often missed because of its non-specific presentation and the belief that it is a rare occurrence. We present a case of bilateral iliac vein stent migrations into the right ventricle and interlobar artery.

Case presentation: A 74 year old woman with history of heart block and venous thromboembolism presented with dyspnea, atrial flutter and nonsustained ventricular tachycardia. Bilateral iliac vein stents were placed five years prior and a pacemaker six weeks prior. She was on warfarin and diltiazem. Physical exam demonstrated jugular distension, murmur, and lower extremity edema. Electrocardiogram revealed AV paced rhythm. 2-D transthoracic echo revealed a hyperechoic mass in the right ventricular outflow tract. A follow up CT revealed one iliac vein stent lodged in the right ventricular outflow tract and the other in a right interlobar pulmonary artery. Cardiothoracic surgery was consulted, and the patient later underwent uneventful surgical removal of both stents.

Conclusion: VSM is considered a rare complication; however, its true incidence is likely higher than commonly thought because many cases go undiagnosed and there is no standardized reporting process.