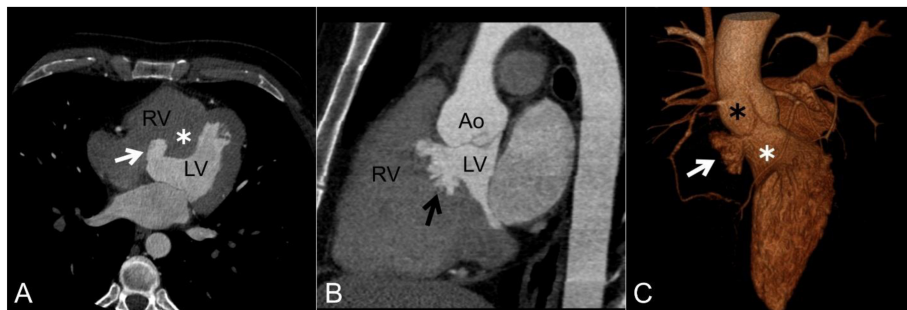


## Interventricular Membranous Septal Aneurysm

A 36-year-old male patient presented to the outpatient clinic with occasional palpitations and sharp chest pain. The patient, who is a smoker, had laboratory findings revealing elevated triglyceride (1042 mg/dL) and LDL (172 mg/dL) levels. An echocardiogram suggested a suspected aneurysm around the aortic root. Further evaluation with coronary computed tomography angiography demonstrated an aneurysm located in the membranous interventricular septum (Figure 1A), immediately inferior to the sinus of Valsalva (Figure 1B and C), without any connection to the aortic valve, with a neck measuring 15 mm in diameter, and oriented toward the right ventricle (Video 1). No atrial septal defect or ventricular septal defect was observed. The coronary arteries were normal. The patient was diagnosed with an interventricular membranous septal aneurysm and is actively being followed up.

Interventricular membranous septal aneurysm is a rare condition that may be associated with ventricular septal defects or congenital heart diseases. These aneurysms are often asymptomatic; however, when complications arise, they can lead to severe symptoms.<sup>1</sup> Potential complications include aortic valve insufficiency, subpulmonic stenosis, arrhythmias, and complete atrioventricular block, as well as thromboembolism. Surgical intervention is the cornerstone of treatment and is indicated in the presence of associated heart disease, hemodynamic abnormalities, or complications related to the aneurysm.<sup>2</sup>



**Figure 1. (A) Coronary CT angiography, RV: right ventricle, LV: left ventricle, white arrow: membranous septal aneurysm. (B) RV: right ventricle, LV: left ventricle, Ao: aorta-sinus of Valsalva, black arrow: membranous septal aneurysm. (C) 3D Volume Rendering Image, white arrow: membranous septal aneurysm, black asterisks: sinus of Valsalva, white asterisks: left ventricle.**

**Informed Consent:** Written informed consent was obtained from the patient for the publication of this case.



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### E-PAGE ORIGINAL IMAGE



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**Video 1:** 3D volume rendering of coronary CT angiography. Aneurysm of the membranous interventricular septum immediately adjacent to the sinus of Valsalva.

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