

Images in
Cardiovascular Medicine



Myocardial Ischemia Caused by Left Sinus of Valsalva Aneurysm in a Healthy Young Woman

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Conflict of Interest

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The data generated in this study is available
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reasonable request.

Sinus of Valsalva aneurysm (SVA) is an uncommon cardiac anomaly and can be congenital or acquired. Among these, the left SVA is extremely rare.¹⁾ A 36-year-old healthy woman visited the local hospital with acute chest pain. Based on the electrocardiogram (**Figure 1**; ST elevation in leads I and augmented vector left and ST depression in lead II, III, augmented vector foot and V4-6) and laboratory tests (creatine kinase: 1,155 U/L, creatine kinase-MB: 281 mcg/L, troponin I: 5.3113 mcg/L), acute coronary syndrome was suspected. However, coronary angiography showed that the left coronary artery was compressed by the left SVA (**Figure 2A**, arrow). On computed tomography, 3.5×3.5 cm sized left SVA was confirmed (**Figure 2B and C**, arrows) and referred to our hospital for emergent Valve sparing aortic root reimplantation. During the surgery, there was a 1×1 cm sized round opening in the left coronary cusp (**Figure 3A**, arrow), and a fresh thrombus was observed, suggesting an acute event (**Figure 3B**, arrow). There were no specific abnormal findings in the genetic or histological examination. The patient discharged uneventfully and is being followed up for heart failure.

Patient's consent has been obtained.

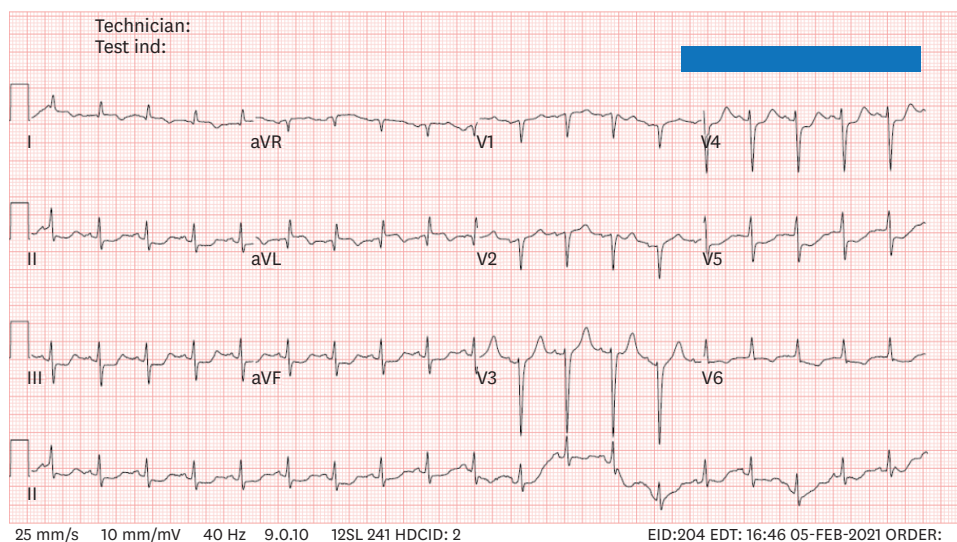


Figure 1. Initial electrocardiogram of the patient.

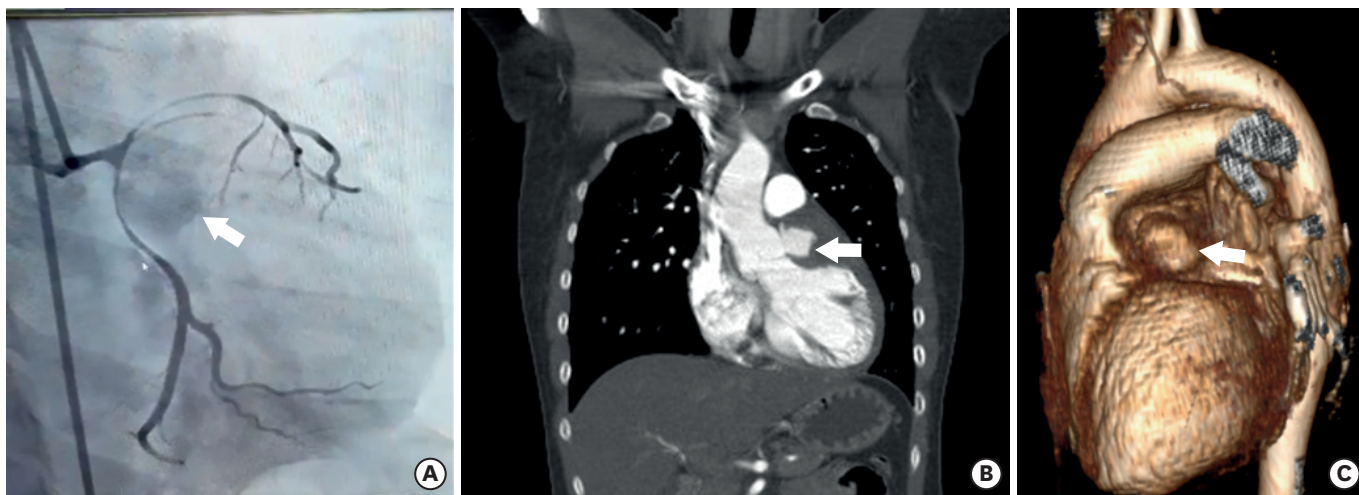


Figure 2. Preoperative imaging study of the patient. (A) Coronary angiography and (B, C) computed tomography of the patient.

Author Contributions

Conceptualization: Kim MS, Song SW; Data curation: Kim MS, Song SW; Formal analysis: Kim MS, Song SW; Investigation: Kim MS; Methodology: Kim MS; Project administration: Song SW; Supervision: Song SW; Validation: Kim MS, Song SW; Visualization: Kim MS; Writing - original draft: Kim MS; Writing - review & editing: Kim MS.

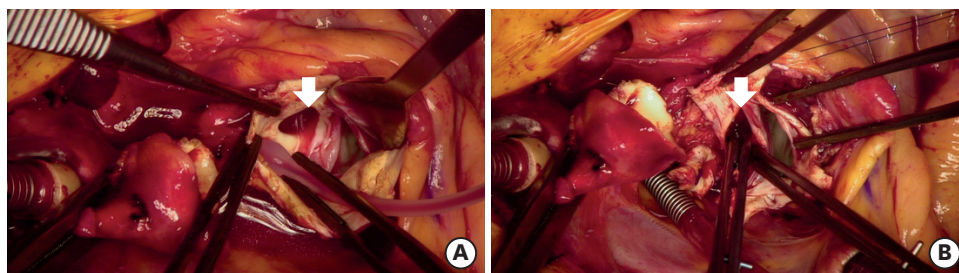


Figure 3. Gross findings in surgical field. (A) A round opening in the left coronary cusp. (B) Fresh thrombus observed in the aneurysm.

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