

# Giant Aneurysmal of the left sinus of Valsalva in adult.

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July 7, 2020

## Abstract

**ABSTRACT:** Objective To investigate the Aneurysmal of the left sinus of Valsalva, and to improve the understanding of the disease and the level of diagnosis and treatment. Methods This article mainly reports a case of huge Aneurysmal of the left sinus of Valsalva patients treated with surgical treatment. Results After surgery, the prognosis of the case was good. Conclusion Aneurysmal of the left sinus of Valsalva has low incidence, which is rare in clinical with no clinical specific symptoms leading to difficulty in early detection. The appropriate surgical method should be considered to the patient condition, to prevent the tumor rupture and the death of patients.

A 51-year-old man was presented to the hospital with chest discomfort and shortness of breath. Chest X-ray showed local calcification and uplift at the left margin of the heart (Figure1, arrow). The transthoracic echocardiography demonstrated that the huge mass was originating from the aortic left coronary sinus and moderate aortic valve regurgitation (Figure2, asterisk). Cardiac computed tomographic angiography showed aneurysmal left sinus of Valsalva (9.2\*7.7cm) and mild aortic valve deformation. The aneurysm was causing compression of left atrial and left pulmonary vein (Figure3 A, B, asterisk). Three-dimensional reconstruction images on cardiac CT showing aneurysmal left sinus of Valsalva and the left coronary artery arises from the aneurysm (Figure3C, asterisk). Patient underwent resection of sinus of Valsalva, a reconstruction of left-coronary Valsalva sinus with a prosthetic patch reimplantation of the left coronary to the aorta and a folding of the aneurysmal (Figure4 A, B, arrow). The patient recovered uneventfully and discharged ten days later. On follow-up examination revealed remarkable reduction of the volume of aneurysmal left of Valsalva and the left coronary artery functions normally (Figure4 C).

Figure 1. Chest x-ray showing the aneurysm (arrow).

Figure 2. Echocardiogram revealed the Aneurysmal of the left sinus of Valsalva (asterisk).

Figure 3. The chest computed tomography showing the aneurysm (A, B) cross-sectional (arrow) (C) Three-dimensional reconstruction (arrow).

Figure 4. Intra-operative image (A, B, arrow) showing the aneurysm and postoperative image (C) showing the left coronary artery (arrow).



