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# Dissection of the Left Ventricular Outflow Septum Due to Relapsing Infective Endocarditis

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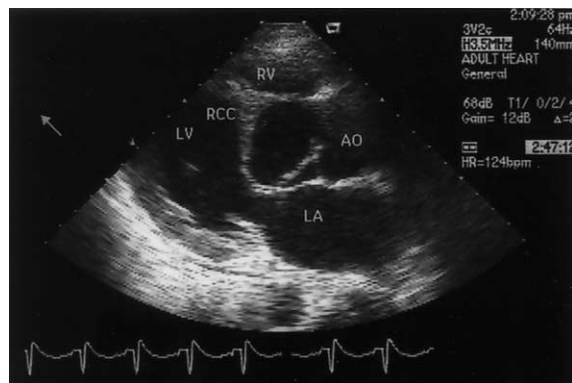


Fig 1.

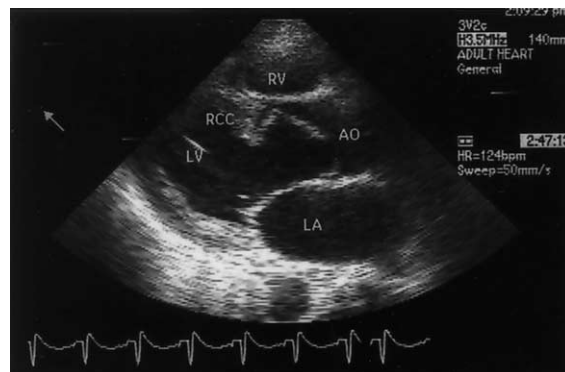


Fig 2.

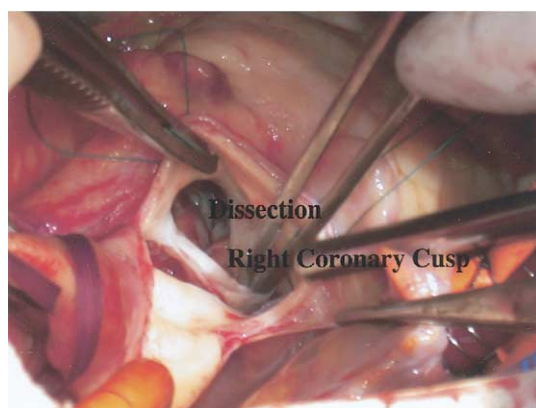


Fig 3.

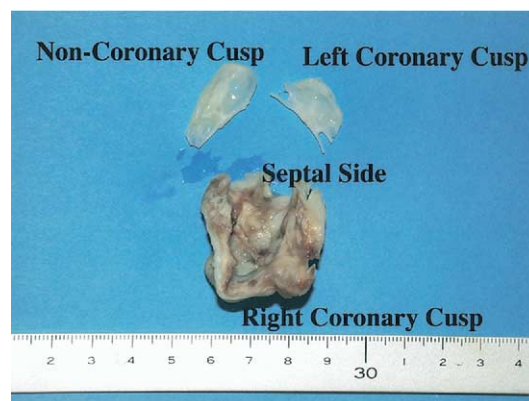


Fig 4.

A 53-year-old male was admitted because of high-grade spike fever and congestive heart failure. The patient had been taking nonsteroidal antiinflammatory drugs for treatment of SAPHO syndrome (synovitis, acne, pustulosis, hyperostosis, osteitis), and various kinds of antibiotics had been given for several months due to fever of unknown origin.

On auscultation, systolic-diastolic murmur was audible along the left sternal border and diastolic rumble (Austin-Flint murmur) was audible at the apical area. Echocardiography revealed prolapse of the right coronary cusp (RCC), aortic regurgitation, and a pouch-like structure on the left ventricular outflow tract obstructing the opening of the anterior mitral leaflet (Figs 1 and 2; AO = aorta; LA = left atrium; LV = left ventricle; RV = right ventricle.) Preoperative blood culture was negative. Surgery revealed an aortic root abscess of the right coronary cusp dissecting the outflow septum and penetrating into

the left ventricle. The “pouch” consisted of the right coronary cusp, fibrous tissue, and granulation tissue (Figs 3 and 4). The diameter of the “pouch” was about 2 cm. The aortic valve, the pouch, and the granulation tissue were all resected. Because the outflow septum had become fibrous and sufficiently tough, the floor of the abscess was left open and aortic valve replacement was performed (St. Jude Medical mechanical valve, 25 mm) (St. Jude, St. Paul, MN).

The aortic root was dissected and reinforced with Dacron strip suturing on the outside of the aortic wall. Coronary artery bypass grafting to the right coronary artery was added using the saphenous vein to restore the coronary blood flow. Bacterial culture of the resected tissue was negative. Pathological examination of the annular tissue did not show any bacterial colony, but chronic inflammatory change. HLA B27 which may be related to aortic valvular disease in SAPHO syndrome was negative in this case. The patient recovered and was transferred to another hospital to undergo rehabilitation therapy after additional administration of antibiotics for a month. The length of stay in our hospital was 48 days.

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