

Image in cardiology

Baumkuchen-Like Sinus of Valsalva

Seno de Valsalva en forma de rosquilla

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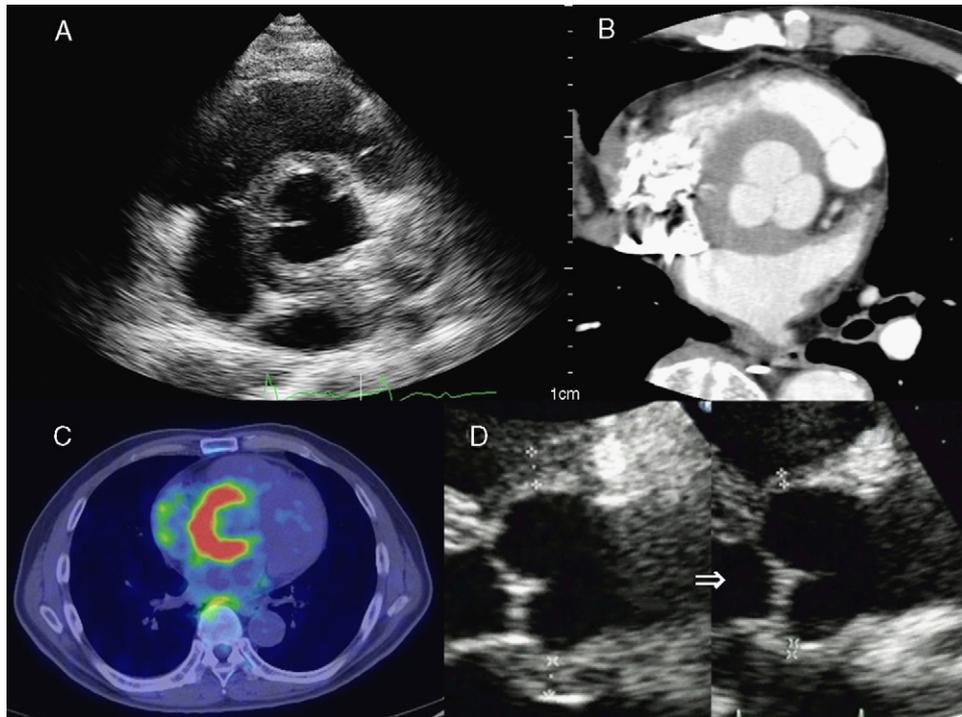


Figure 1.

A 69-year-old man visited our clinic complaining of dyspnea. A chest radiograph revealed pleural effusion, and an electrocardiogram revealed complete atrioventricular block. Subsequent echocardiography showed normal left ventricular function, but marked thickening (12 mm) of the wall localized to the sinus of Valsalva (Fig. 1A). Computed tomography (CT) also revealed similar findings (Fig. 1B). Blood tests revealed an elevated erythrocyte sedimentation rate, and positron emission CT showed accumulation corresponding to the thickened wall at the sinus of Valsalva (Fig. 1C). At first, we diagnosed aortic intramural hematoma and treated with aggressive blood-pressure control, but during the first several weeks of treatment the thickened wall did not decrease at all. Subsequently, the patient started to complain of severe throbbing headaches, and tenderness of the temporal region. Then, based on the diagnostic criteria of the American College of Rheumatology, temporal arteritis could be diagnosed. It appeared that temporal arteritis had caused localized thickening of the arterial wall at the sinus of Valsalva, and that the inflammation had affected the conducting system, resulting in complete atrioventricular block and heart failure. Administration of prednisolone was initiated, which resulted in prompt clinical improvement. Furthermore, the thickened wall gradually returned to normal thickness within 2 weeks of the start of prednisolone (Fig. 1D). Aortitis as a component of temporal arteritis is believed to commonly involve the aortic arch and its branches. A case of inflammation and thickening of the wall localized to the sinus of Valsalva has not been reported before and is extremely rare.

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Available online 29 June 2011