

## CASE IMAGE

## Multiple saphenous vein graft aneurysms

## Çoklu safen ven greft anevrizması

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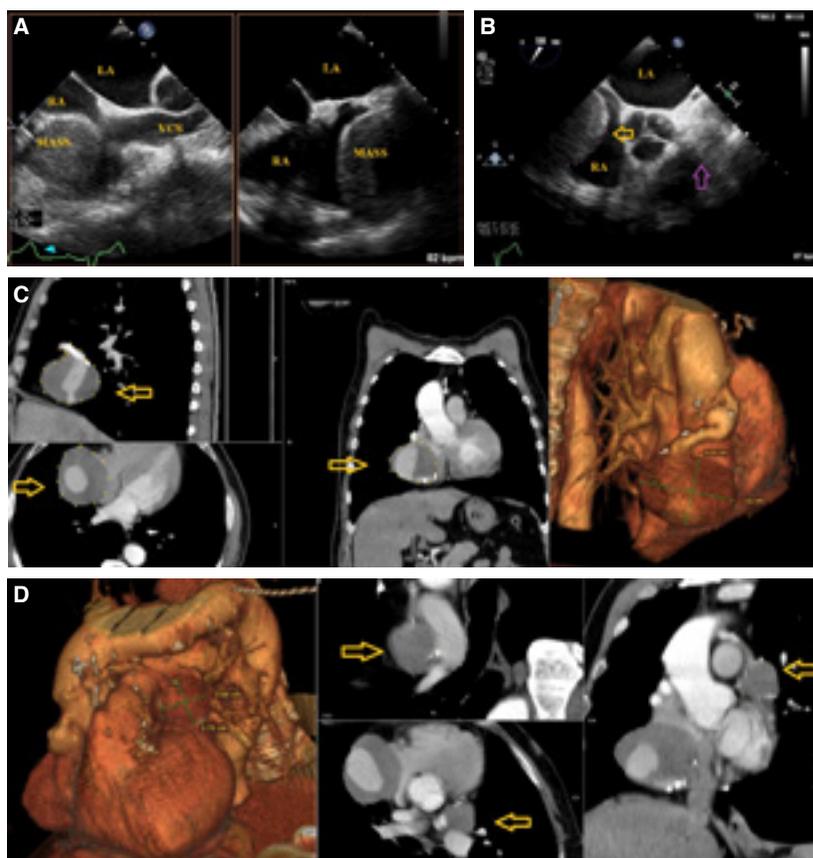
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A 60-year-old male patient who had been admitted to another hospital with shortness of breath was referred to our hospital with a preliminary diagnosis of a mass in the right heart. The patient's creatinine level was 1.7 gr/dL, while other biochemical and hematological parameters were within normal limits. The patient had 3-vessel coronary artery bypass

graft (CABG) surgery (aorta [Ao]-right coronary artery [RCA] saphenous vein graft, Ao-circumflex [Cx] saphenous graft, and left internal mammary artery [LIMA]-left anterior descending artery [LAD]) 12 years previously. Transesophageal echocardiography (TEE) imaging revealed a mass compressing the exterior of the lateral wall of the right atrium (Fig. A, B). A TEE evalua-

tion was used to examine the Ao-RCA saphenous graft aneurysm (Fig. B, Video 1\*, Video 5\*) and the Ao-Cx saphenous graft aneurysm (Fig. B, Video 2\*, Video 5\*), and to perform color Doppler imaging of the Ao-RCA saphenous graft aneurysm (Video 3\*) and pulsed-wave Doppler flow imaging of the right atrium (Video 4\*). Echocardiography indicated a left ventricular ejection fraction of 35% to 40%. Coronary angiography revealed that the LAD, RCA, and Cx arteries were completely occluded but the LIMA-LAD artery graft remained patent (Video 6\*). Coronary angiography also illustrated aneurysmatic dilatation of both the Ao-RCA saphenous graft and the Ao-Cx saphenous graft (Video 7). Multislice computerized tomography (CT) images showed thrombosed aneurysmatic dilatation in the Ao-RCA saphenous graft (6x7.9 cm) (Fig. C) and the Ao-Cx saphenous graft (3.6x3.79 cm) (Fig. D). The hospital cardiology and cardiovascular surgery committee decided that the best course of action was to excise the aneurysms and redo the bypass surgery. The patient, however, declined the surgery. He died 1 month later due to sudden cardiac arrest. A saphenous

vein graft aneurysm is a rare complication after CABG surgery, though since most cases are asymptomatic, the precise frequency is unclear. More cases are now diagnosed due to the widespread use of imaging tools such as echocardiography and multislice CT. Treatment can be performed with redo bypass surgery or percutaneous methods in appropriate cases. In this case, a patient who underwent 3-vessel CABG surgery 12 years earlier developed an aneurysm in 2 saphenous vein grafts.



**Figures– (A)** Transesophageal echocardiography image. LA: Left atrium; RA: Right atrium; VCS: Vena cava superior. **(B)** Short-axis image showing the aorta (Ao)-right coronary artery (RCA) aneurysm (yellow arrow) and the Ao-circumflex (Cx) saphenous graft aneurysm (purple arrow). LA: Left atrium; RA: Right atrium. **(C)** Computed tomography images of the aorta-right coronary artery saphenous graft aneurysm (arrows). **(D)** Computed tomography images of the aorta-circumflex saphenous graft aneurysm (arrows). \*Supplementary video files associated with this presentation can be found in the online version of the journal.