Acute chest pain due to ruptured giant aortocoronary saphenous vein graft aneurysm

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A 66-year-old man suddenly felt an intense acute chest pain with posterior irradiation, associated with shortness of breath. His medical history was remarkable for hypertension, hypercholesterolemia and smoking. He underwent quadruple coronary artery bypass graft surgery 17 years previously, consisting of three sequential grafts made with the same saphenous vein, and one arterial graft on the left anterior descending artery. The initial workup ruled out acute coronary syndrome; therefore, a thoracic computed tomography (CT) scan was performed. The CT scan revealed an enormous hematoma on the right side of the heart with a diameter of 57 mm × 48 mm, filled with contrast dye and compressing the right heart cavities with signs of pericardial suffusion (Figure 1A). Three-dimensional image reconstruction showed large aneurysms originating from the saphenous vein graft (Figure 1B). The image only presented the area filled with contrast medium, so only the true lumen of the aneurysm was visible. Coronary bypass angiography confirmed the presence of a large

aneurysm that arose from the proximal and midportion of the sequential saphenous vein graft (Figure 1C).

Rupture of vein graft aneurysms remains a rare complication; there are only a few reported cases (1,2). The present patient presented with a life-threatening condition with concealed rupture and underwent successful repeat coronary artery bypass graft surgery to the inflamed tissue. A CT scan should be performed to rule out this diagnosis in bypassed patients with unexplained chest pain.

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Figure 1 **A** Computed tomography scan revealing an enormous hematoma on the right side of the heart with a diameter of 57 mm × 48 mm (red arrows), filled with contrast dye and compressing the right heart cavities with signs of pericardial suffusion. **B** Three-dimensional image reconstruction showing large aneurysms originating from the saphenous vein graft (red arrows). This image only presents the area filled with contrast medium, so only the true lumen of the aneurysm is visible. **C** Coronary bypass angiography confirming the presence of a large aneurysm that arose from the proximal and midportion of the sequential saphenous vein graft (red arrows)

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