

A large mass in the pericardial space

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Case description

A 73-year-old woman with a history of hypertension was referred with pericardial effusion and suspected cardiac tamponade. She reported progressive dyspnoea and pain in the back and between the scapulae for several weeks. Except a dry cough and fever, she reported no other symptoms. Physical examination revealed a normal blood pressure without left–right difference. She was tachycardic and showed jugular venous distension. Oxygen saturation was 94% while on 2 L/min oxygen supply. Remaining physical examination was unremarkable. Electrocardiography showed atrial tachycardia at

125/min without signs of ischaemia. Laboratory tests identified elevated C-reactive protein (216 mg/L), elevated high-sensitive troponin T (471 ng/L), and low lactate levels. Echocardiography showed circumferential pericardial effusion up to 2.5 cm and a large mass in the pericardial space near anterior side of the left ventricle. Computed tomography showed no aortic dissection but revealed a large partially calcified mass in the pericardium (Figure 1A). Cardiovascular magnetic resonance imaging showed an 8 × 7 × 6 cm mass in the pericardial space near the anterior interventricular groove suggestive of a giant coronary artery aneurysm (gCAA) almost completely filled with thrombus. No myocardial infarction was seen on late gadolinium

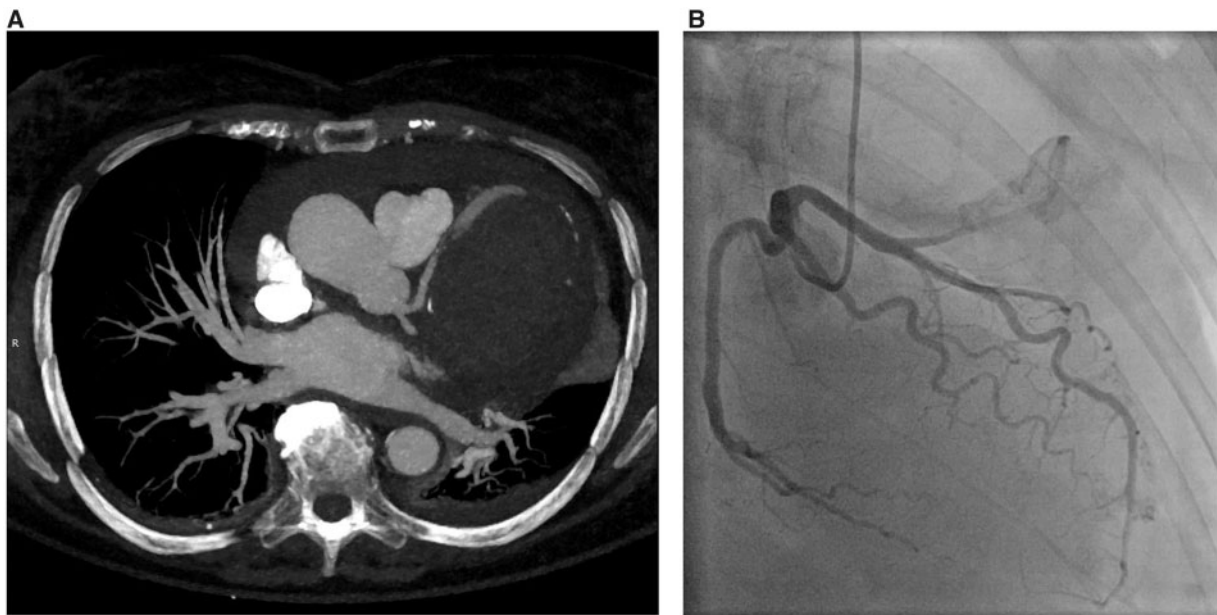


Figure 1 Computed tomography (A) and coronary angiogram (B) showing a large partially calcified mass in the pericardium supplied by a coronary artery (A).

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Figure 2 Cardiovascular magnetic resonance imaging of the giant coronary aneurysm: short axis steady state free procession (A), first pass perfusion (B), and late gadolinium enhancement (C) images.

enhancement MRI images (Figure 2). Coronary angiography (CA) revealed swirling of contrast within the gCAA originating from the first diagonal coronary artery (Figure 1B). However on both cine magnetic resonance imaging and CA, no clear drainage of the gCAA could be determined. gCAA's usually arise from the right coronary artery (see Supplementary material online, videos).¹ They are caused by vasculitides, congenital heart disease (CHD), or coronary artery disease (CAD). Our patient showed no obstructive CAD, vasculitides, or CHD. Although percutaneous closure may be considered in patients with gCAA's, surgical correction is the preferred therapy.² Our patient refused surgical correction and recovered well after percutaneous closure of the first diagonal artery by a vascular plug and drainage of pericardial effusion. She was treated with aspirin for 6 months for endothelialization of the vascular plug.

Supplementary material

Supplementary material is available at *European Heart Journal - Case Reports* online.

Consent: The author/s confirm that written consent for submission and publication of this case report including image(s) and associated text has been obtained from the patient in line with COPE guidance.

Conflict of interest: none declared.

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