IMAGING IN CARDIOLOGY

Giant coronary aneurysms: three-dimensional reconstruction

L. M. van Beek · H. Luijten

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Abstract A 31 year old man was referred for the evaluation of chest pain. Cardiac CT reconstruction revealed multiple calcified giant coronary aneurysms. Most likely this patient suffered from subclinical Kawasaki's disease in his childhood.

Keywords Coronary aneurysms · CT-reconstruction · M. Kawasaki · Chestpain

A 31-year-old man was referred for the evaluation of chest pain. Once a week he experienced midsternal chest pain during exercise. It typically lasted for minutes; sublingual nitroglycerin had no effect. He suffered an inferolateral myocardial infarction in April 2008, and had no known history of Kawasaki's disease. A coronary angiogram (Movie 1) revealed multiple calcified giant aneurysms of the left (Fig. 1a) and the right (Fig. 1b) coronary artery. Magnetic resonance imaging showed good systolic left ventricular function with an akinetic basal inferoseptal wall and no evidence of systemic or cerebral arterial aneurysms. Nuclear myocardial imaging revealed no evidence of ischaemia. With combination therapy consisting of oral anticoagulation therapy, aspirin, β -blockade and a statin, the patient became free of symptoms. Cardiac computed tomography reconstruction (Movie 2) was performed to evaluate size, location and composition of the coronary artery aneurysms and for follow-up reference: giant aneurysms of the left (Fig. 1a/c/f) and the right (Fig. 1b/d/e) coronary artery. Most likely this patient suffered from subclinical Kawasaki's disease in his childhood.

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L. M. van Beek (🖂) · H. Luijten Radboud University Nijmegen Medical Center, Nijmegen, the Netherlands e-mail: l.vanbeek2@chello.nl Fig. 1 a Computer tomography of the heart: transverse view. showing aneurysms of the LAD with calcification; b Computer tomography of the heart: transverse view, showing aneurysms of the RCA and LAD; c Computer tomography reconstruction: leftlateral view showing proximal aneurysms of the LAD and CX; d Computer tomography reconstruction: anterolateral view showing proximal aneurysms of the RCA and LAD; e Coronary angiography: LAO 40 CRANIAL 5 showing aneurysms of the RCA; f Coronary angiography: RAO 30 CAUDAL 20 showing aneurysms of the LAD and CX; LCA left coronary artery; LAD left anterior descending coronary artery; CX circumflex coronary artery; RCA right coronary artery



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