Left ventricular aneurysm with massive myocardial calcification

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A 68-year-old man with mild shortness of breath was referred for computed tomography angiography (CTA). When he was 40 years old, he had been admitted to

another hospital because of acute anterior myocardial infarction. His chest X-ray showed curvilinear shaped calcification along the cardiac contour (Fig. 1a). Volume

Fig. 1 **a** The lateral view of chest X-ray showing curvilinear shaped calcification along the cardiac contour; **b** Volume rendering reconstruction image of the CTA showing the calcified myocardium located on the territory of left anterior descending coronary artery (LAD). Arrow indicates the point of LAD obstruction

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rendering reconstruction imaging showed a large area of high-attenuation density in the territory of the obstructed left anterior descending coronary artery (Fig. 1b). Multi-planar reconstruction imaging revealed marked thinning of the left ventricular myocardium with fine myocardial calcification in the anteroseptal-lateral segments (Fig. 2). Cine images of CTA showed absent regional wall thickening (Movies 1 and 2). Myocardial calcification is usually classified as either dystrophic or metastatic [1]. Dystrophic calcification usually occurs in areas of transmural myocardial infarction and develops in areas of

Fig. 2 Multiplanar reconstruction image of CTA showing marked thinning of the left ventricular myocardium with fine myocardial calcification in the anteroseptal-lateral segments (Left: horizontal long-axis image, Movie 1,) (Right: short-axis image, Movie 2)

ventricular aneurysm. Cardiac CTA is well suited to depict the extent of postischemic changes to the myocardium including calcification by evaluating both morphological and functional information.

Reference

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