Multimodality imaging of left ventricular aneurysm: tools of the trade

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Image description
A 68-year-old man with no significant medical history had new inferior Q-waves on electrocardiogram during an office visit (Panel A). Trans-thoracic echocardiography revealed a large left ventricular (LV) aneurysm at the inferobasal LV wall and normal LV ejection fraction (Panel B, red arrow, see Supplementary data online, Videos S1–S3). Cardiac magnetic resonance imaging showed an inferobasal location of the true aneurysm with scar, dyskinesia, and delayed enhancement (Panels C and D, yellow and red arrows; see Supplementary data online, Video S4). Cardiac catheterization identified the true LV aneurysm and proximal occlusion of the right coronary artery (Panels E and F; see Supplementary data online, Videos S5 and S6). The patient declined surgical evaluation.

True LV aneurysm in the inferobasal location is rare. Multimodal imaging helps surgical planning by defining the relation between papillary muscles and the aneurysm and by delineating viable and non viable myocardial territories. A, aneurysm; Ao, aorta; LA, left atrium.

Supplementary data are available at European Heart Journal – Cardiovascular Imaging online.

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