Image in cardiology

Giant Cardiac Cyst: Rare Image of Ventricular Aneurysm

Quiste cardiaco gigante: imagen singular de aneurisma ventricular

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Figure 1.

Figure 2.



Figure 3.

Ten years after experiencing an anterior myocardial infarction, a 71-year-old man underwent cardiac magnetic resonance imaging in the workup for placement of an implantable automatic defibrillator. A large anteroapical aneurysm was observed in the cine sequences (Figures 1A and B), and the signal difference between the tissue covering the aneurysm and the myocardium indicated extensive ventricular wall thrombosis (*). Following gadolinium administration (Figures 2A-C), there was transmural delayed enhancement (arrow) of the entire aneurysmal area, with an internal hypointensity corresponding to an extensive mural thrombus within the aneurysm.

Two years after implantation of the automatic defibrillator, the patient underwent catheterization due to angina on exertion. During the procedure (Figure 3A, video [supplementary material]), a large, rounded, calcified image was visualized, showing synchronic movement with the tip of the electrode in the right ventricle and corresponding to the previously diagnosed thrombosed anteroapical aneurysm. Coronary angiography (Figures 3B and C[LCT, left coronary trunk; LAD, left anterior descending; Cx, circumflex; Int, intermediate branch; RC, right coronary]) showed a chronic occlusion of the proximal left anterior descending artery. There were no significant lesions in the remaining arteries, and the patient was discharged after optimization of medical treatment.

In this case, cardiac magnetic resonance imaging enabled differentiation between the radiologic image of a thrombosed ventricular aneurysm and other cystic entities such as hydatid cyst or pericardial cyst, as well as entities that can show myopericardial calcifications, such as constrictive pericarditis and endomyocardial fibrosis.

APPENDIX A. SUPPLEMENTARY MATERIAL

Supplementary material associated with this article can be found in the online version available, at doi:10.1016/j. rec.2013.09.022.

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