A massive calcified left ventricular aneurysm

Masif kalsifikasyon içeren sol ventrikül anevrizması

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A 60-year-old woman presented with chest pain and dyspnea, and her medical history included an anterior myocardial infarction eight years earlier. An electrocardiogram revealed ST-segment elevation with associated Q-waves in the V1, V2, II, III and aVF leads. The transthoracic echocardiography showed a hyper-reflective calcified apical aneurysm. The patient’s end diastolic volume was 186 mL, and she had an ejection fraction of 38%. Subsequent coronary angiography revealed a total occlusion of the left anterior descending artery and the mid-portion of the right coronary artery as well as critical stenosis of the circumflex coronary artery. A oval-shaped calcified structure that resembled a calcified apical left ventricular aneurysm was observed during the left main artery (Figure 1a) and right coronary artery injections (Figure 1b). The patient then underwent an uneventful quadruple myocardial revascularization operation that included the resection of the calcified aneurysm (Figure 2a) and the reconstruction of the left ventricular wall via endoventricular patch plasty, which was previously described by Cooley.¹ The excised tissue was identified as a massive, calcified, semi-oval sphere measuring 4.5x4 cm (Figure 2b).

Left ventricular aneurysms occur as a serious complication of transmural myocardial infarction, but massive calcified ventricular aneurysms are seen much less frequently.²⁻⁴ However, as our case points out, the possibility of these types of aneurysms should not be overlooked.

Figure 1. (a) Coronary angiographic images showing the total occlusion of the proximal left anterior descending artery and (b) the mid-portion of the right coronary artery as well as an oval-shaped calcified structure (arrows) related to a calcified left ventricular aneurysm.

Figure 2. (a) Resection of the calcified left ventricular aneurysm and (b) the excised massive calcified tissue.

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REFERENCES


