Silent embolization of a large left ventricular thrombus

A 59-year-old man with a history of extensive anterior myocardial infarction was admitted for progressive shortness of breath attributed to acute decompensation of heart failure. On transthoracic echocardiography there was moderately depressed left ventricular ejection fraction and a large anteroseptal and apical akinesia. The study also showed a large (2 × 2 cm), highly mobile mass attached to the left ventricular apex (Fig. 1A and B; Movie 1). In this context a thrombus was suspected and intravenous anticoagulation with unfractionated heparin was initiated. Transthoracic real-time three-dimensional echocardiography clearly showed the small pedunculus of the thrombus (Fig. 1C; Movie 2). The patient was scheduled for surgery but on echocardiographic control 36 hours later the highly mobile mass had disappeared (Fig. 1D). There were no signs or symptoms of systemic embolization. A total body computed tomography scan and arterial Doppler examination of the lower limbs did not disclose arterial occlusion. The patient was discharged on oral anticoagulation and had an uneventful course over the following six months.

Therapeutic management of mobile left ventricular thrombi remains controversial. Initiation of anticoagulation is mandatory. Some authors recommend surgical removal of highly mobile thrombi, especially in case of an embolic event. This case shows the
Figure 1. A, B. Echocardiograms showing large (2 × 2 cm), highly mobile mass attached to the left ventricular apex (arrowheads). C. Transthoracic real-time three-dimensional echocardiogram showing small pedunculus of the thrombus (arrow). D. Repeat echocardiogram at 36 hours.

likely silent embolization of a large left ventricular thrombus under anticoagulation therapy.

Conflicts of interest

None.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.acvd.2009.08.005.