Successful Surgical Removal of a Large Pedunculated Apical Thrombus without Any Embolic Events

Büyük Saplı Apikal Yerleşimli Trombüsün Embolik Olay Olmaksızın Başarılı Bir Şekilde Cerrahi Olarak Çıkarılması

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Left ventricular (LV) thrombus, a feared complication of severe LV dysfunction, is usually located in left ventricular apical aneurysm⁽¹⁾. Protrusion and mobility of thrombi have a high risk of recurrent embolic strokes than mural thrombi⁽²⁾. A 67-year-old male newly diagnosed with ischemic dilated cardiomyopathy was admitted to our hospital with severe dyspnea and pulmonary edema. Echocardiography on admission revealed an LVEF of 20%-25%; global hypokinesis with apical akinesis; and a large, mobile apical thrombus measuring 50 mm x 20 mm (Figure 1). Intravenous (IV) unfractionated heparin, IV diuretics, and non-invasive mechanical ventilation were initiated to relieve symptoms and minimalize embolic risk. Before the treatment options were discussed within the heart team, coronary angiography was performed that revealed two vessels indicating coronary artery disease with stenosis of the left anterior descending (LAD) and first diagonal (D1) coronary arteries. Because a thrombus carries a high risk of embolization, emergency open-heart surgery was planned via a median sternotomy. The fragile thrombus of about 5 cm in diameter attached to the apex was completely resected, and the left internal mammary artery and a saphenous vein graft were anastomosed to the LAD and D1 coronary arteries, respectively. Postoperative transthoracic echocardiogram showed no evidence of a residual thrombus with an ejection fraction of 25% (Figure 2). Following the postoperative course, the patient was discharged uneventfully with the administration of warfarin, metoprolol, and ramipril on the sixth day.



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Figure 1. (A) Apical 4-chamber and (B) apical 2-chamber views following transthoracic echocardiography showing an apical thrombus (arrow) measuring 50 mm x 20 mm. LA: Left atrium, LV: Left ventricle.



Figure 2. (A) Apical 4-chamber and (B) apical 2-chamber views following postoperative transthoracic echocardiography demonstrating no evidence of a residual thrombus. LA: Left atrium: LV: Left ventricle.

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