Left ventricular thrombus in a patient with esophageal carcinoma

Özofagus karsinomlu bir hastada sol ventrikül içinde trombus

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A 49-year-old, male patient who had been treated with the diagnosis of inoperable esophageal carcinoma (poorly differentiated adenocarcinoma) recently was admitted to our cardiology department. He was suffering from dyspnea, palpitation and chest pain. He had been given radiotherapy, cisplatin and 5- fluorouracil for the cancer therapy previously. His physical examination was normal. Precordial negative T waves and horizontal ST depression were seen on the electrocardiogram. Cardiac enzymes were normal. Echocardiography (Fig. 1 and 2) and cardiac magnetic resonance imaging (Fig. 3 and 4) showed us a fairly mobile, pedunculated masses in the left ventricle (See corresponding video/movie image at www.anakarder.com) without any wall motion abnormalities. The patient underwent surgery because of a transient ischemic attack. Pathological evaluation of the specimen, which was taken during the surgery revealed a thrombus as the origin of the masses.

The 5- fluorouracil has endothelial toxicity resulting in thrombogenic effect and release of vasoactive substances (1, 2). Patients with prior coronary disease and/or those receiving concurrent radiation therapy are at risk for 5- fluorouracil induced heart disease (3). Cisplatin has also potential endothelial and vasospastic effects. There is one case on cisplatin induced localized aortic thrombus and one case about transient intracardiac thrombus after 5-fluorouracil therapy on the literature (4, 5). Cancer also promotes the synthesis and secretion of procoagulants.

References

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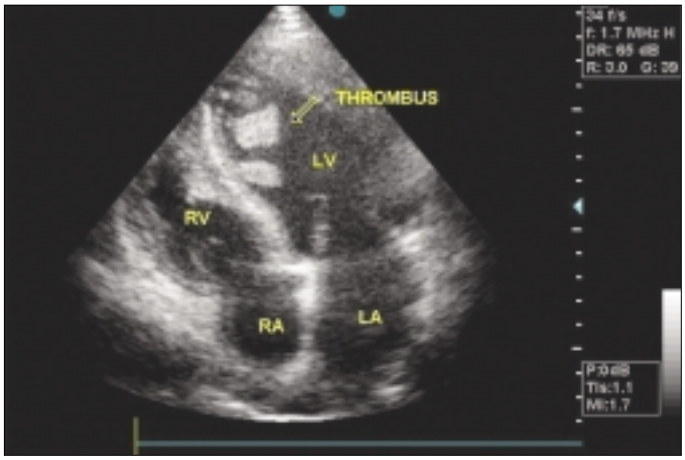

Figure 1. Apical four-chamber view. Arrow shows left ventricular thrombus

LA- left atrium, LV- left ventricle, RA- right atrium, RV – right ventricle

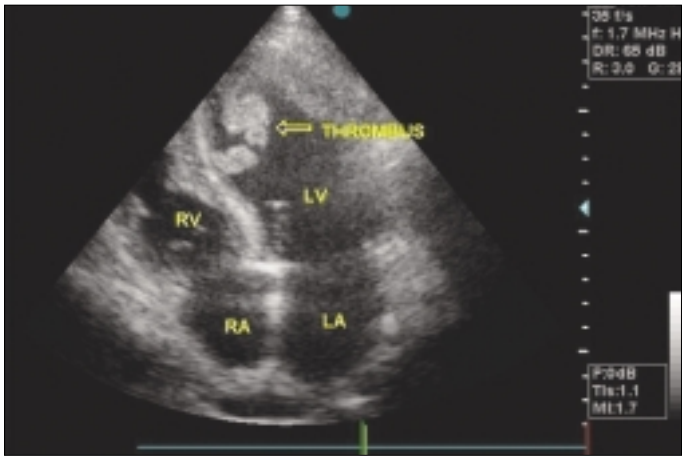

Figure 2. Apical four-chamber view. Arrow shows left ventricular thrombus in another sequence of diastole

LA- left atrium, LV- left ventricle, RA- right atrium, RV – right ventricle

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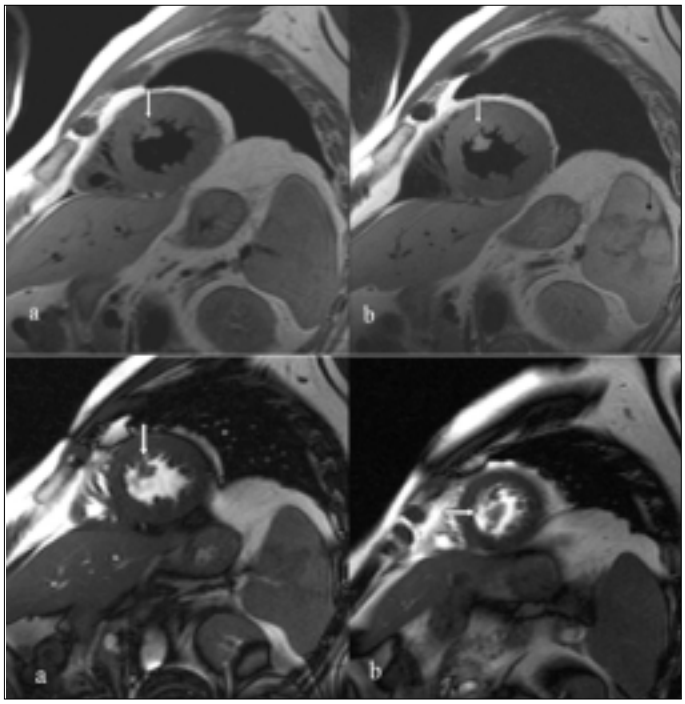

Figure 3. In T1 weighted (a) and T2 weighted (b) cardiac magnetic resonance imaging study, short axis views show hyperintense mass image derived from anterior myocardial wall in the left ventricular cavity (white arrow, upper images). Additionally, T2W study reveals an old infarction in the spleen (black arrow,upper images). In true FISP short axis sequences, pedunculated mass image derived from anterior and inferior wall is seen (arrow, lower left and lower right images)

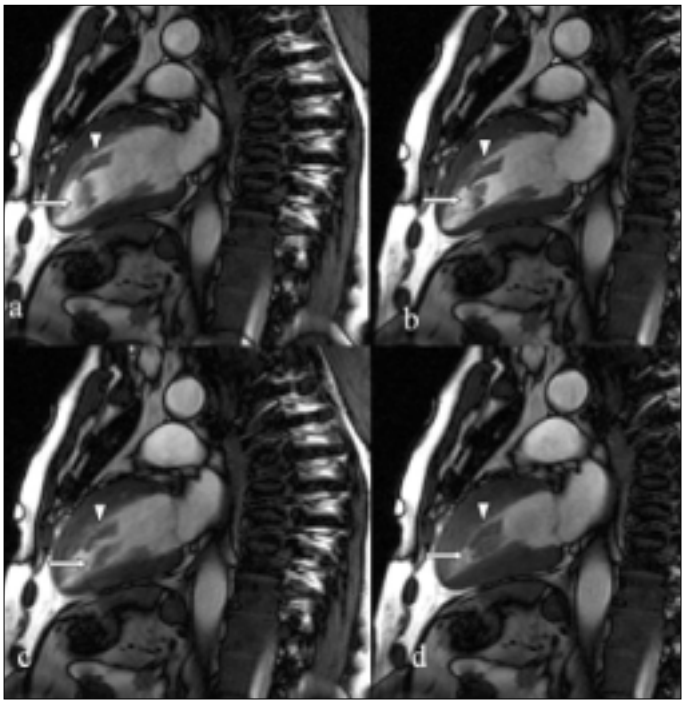

Figure 4. In two- chamber magnetic resonance imaging cine view (a-d), arrowheads show immobile masses derived from anterior wall and arrows show mobile, pedunculated masses derived from diaphragmatic wall in systole and diastole