

Figure 1. Transthoracic echocardiography Vignette: Pre-CRT: a) Long-axis parasternal view, M-mode, left intraventricular dyssynchrony with a wide QRS complex; b) Apical five-chamber view, left intraventricular dyssynchrony causing severe mitral regurgitation; c) 3D QLAB, assessment of the left ventricular function and dyssynchrony; Study of left endoventricular pacing electrode: d) Long-axis parasternal view, the endoventricular electrode is placed on the interventricular septum; e) Apical five-chamber view; f) Apical-four chamber view; Post-CRT: g) Long-axis parasternal view, M-mode, synchrony of the left ventricle with a narrow QRS complex; h) Apical five-chamber view, mild mitral regurgitation; i) 3D QLAB, assessment of the left ventricular function and synchrony

CRT - cardiac resynchronization therapy, QLAB - 3D quantification laboratory

avoid a more invasive surgical approach (general anaesthesia and single-lung ventilation).

The post-operative TTE showed a good left ventricle resynchronization (Fig. 1G) with a standard deviation of 4.5%, a delay of activation between septum and lateral wall of about 100 msec and with a significant improvement of the clinical status (NYHA IIa), and of the LVEF (about 50%) and with a residual mild mitral regurgitation (Fig. 1H-I, Video 3, 4. See corresponding video/movie images at www.anakarder.com). At discharge the patient was indefinitely medicated with beta-blockers, angiotensin converting enzyme inhibitors, diuretic and antiplatelet drugs. The patient was followed-up for 6 months, without complications and with unchanged TTE results.

Video 1. Apical five chamber view, left intraventricular dyssynchrony causing severe mitral regurgitation

Video 2. 3D QLAB, assessment of the left ventricle function and dyssynchrony

Video 3. Apical five-chamber view, improvement of the left ventricle ejection fraction and a residual mild mitral regurgitation

Video 4. 3D QLAB, assessment of the left ventricular function and synchrony

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Melting heart: dilated phase of hypertrophic cardiomyopathy



Eriyen kalp: Hipertrofik kardiyomiyopatinin dilate fazı

A 27-year-old male patient was admitted with complaints of exertional dyspnea and limited exercise capacity (New York Heart Association class III). At the age of 10 years, he had been admitted to hospital for the first time, and was diagnosed as having hypertrophic cardiomyopathy (HCM) with midventricular obstruction (Fig. 1). Due to syncope episodes and increased septal thickness (39 mm), implantable cardioverter defibrillator (ICD) implantation was performed at the age of 19 years. His medication includes metoprolol 50 mg bid and aspirin 100 mg. On the present admission, examination revealed blood pressure of 110/60 mmHg, pulse of 88 bpm, fine crackles in the bilateral lower lobes and jugular venous distension. Electrocardiogram (ECG) revealed sinus rhythm and prominent intraventricular conduction delay (QRS: 160 msn) which was normal except strain pattern at the age of 10 years (Fig. 2A). Echocardiography showed left ventricular (LV) end-diastolic diameter of 62 mm, LV ejection fraction of 24%, no midventricular gradient and septal thickness of 12 mm (Fig. 2B,



Figure 1. A) ECG at the age of 10 years showing sinus rhythm and LV strain pattern with normal QRS duration. (B) Echocardiography at the age of 19 years revealed LV end-diastolic diameter of 27 mm and septal thickness of 39 mm

ECG - electrocardiogram, LV - left ventricle



Figure 2. (A) ECG on the admission showing sinus rhythm with prominent intraventricular conduction delay (QRS-160 ms) (B) Echocardiography on the admission revealed LV end-diastolic diameter of 62 mm and septal thickness of 12 mm

ECG - electrocardiogram, LV - left ventricle

Video 1, 2. See corresponding video/movie images at www.anakarder.com. Biochemical tests revealed increased brain natriuretic peptide (BNP) level 3880 pg/mL (N: 0-100). So, he was accepted in the dilated phase of HCMP. He was hospitalized due to acute decompensation. Intravenous furosemide and levosimendan infusion were given and he was improved clinically on 5th day of admission. Also BNP level decreased to 318 pg/mL. He has been conducted for transplantation program and discharged with optimal medications.

Video 1, 2. Parasternal long-axis (Video 1) and apical 4-chamber (Video 2) views showing dilated and reduced ejection fraction of the left ventricle

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Huge aortic vegetation embolizing to right iliac artery



Sağ iliyak artere embolize olan büyük aortik vejetasyon

A 55-year-old male patient was admitted to emergency room with pulmonary edema. He had been complaining about progressive shortness of breath and fever within last 10 days. The echocardiography revealed 2.0x2.1 cm in diameter mass attached to right aortic cusp (Fig. 1A, Video 1, 2, Fig. 1B and Video 3. See corresponding video/movie images at www.anakarder.com). See corresponding video/movie images at www.anakarder.com). During follow up for infective endocarditis with medical treatment, peripheral embolization to right iliac artery was occurred (Fig. 2). Aorta-femoro-popliteal arteriography showed a filling defect in the right common iliac artery. After peripheral embolization,

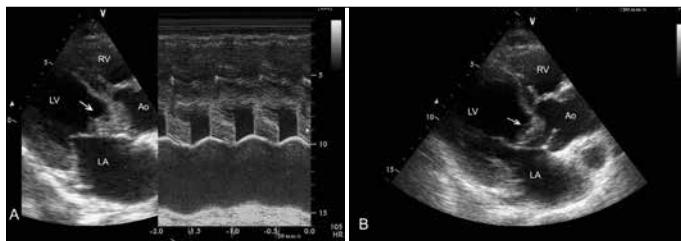


Figure 1. A) Transthoracic echocardiography (TTE): the parasternal long-axis view shows an aortic mass (white arrow) attached to right aortic cusp of the aortic valve. In M-mode echocardiography, this aortic mass fills the aortic orifice. **B)** Parasternal long-axis view of TTE after embolization, it is seen that the aortic mass (white arrow) has become smaller in size. It is also seen that this aortic mass prevents aortic valve closure

Ao - aorta, LA - left atrium, LV - left ventricle, RV - right ventricle



Figure 2. Aorto-femoro-popliteal arteriography of the same patient revealed a filling defect (black arrow) from the bifurcation of the abdominal aorta to the bifurcation of the right common iliac artery. It is seen that this filling defect causes significant obstruction but still permits passage of blood

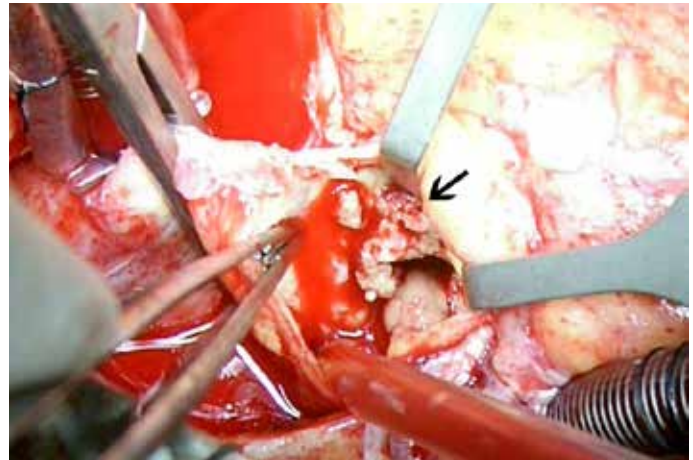


Figure 3. Intraoperative image of the same patient shows the aortic vegetation (black arrow). The patient died during the operation

control transthoracic echocardiography revealed that the aortic vegetation became smaller in size. The patient was referred to cardiovascular surgery for aortic valve replacement. Intraoperatively huge vegetation on the aortic valve was detected (Fig. 3). The patient died during the operation. This case report represents very demonstrative example of how huge aortic vegetation may cause complication.

Video 1. The parasternal long axis view shows an aortic mass attached to the aortic valve

Video 2. The parasternal short axis view reveals a mobile aortic mass on the right coronary cusp which moves with the aortic valve

Video 3. The parasternal long axis view shows that the vegetative mass has become smaller after peripheral embolization

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