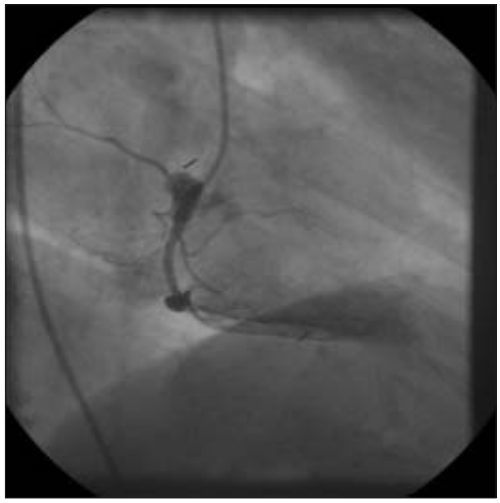

Figure 1. Right anterior oblique view of right coronary artery

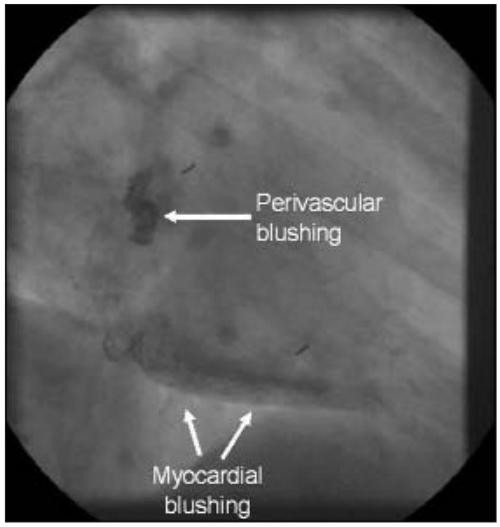

Figure 2. Myocardial and perivascular blushing are seen in fluoroscopic view at right anterior oblique position

It is advised to inject contrast volume at a rate of 7 ml at 2.1 ml/sec for the left, and 4.8 ml at 1.7 ml/sec for the right coronary arteries. It was suggested to train the fellows for adjusting the delivery rate and duration of manual contrast to match the observed filling pattern of the particular vessel being injected. In conclusion; during the training period of novice fellows injection techniques and skills should closely be supervised for injection volume and pressure.

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Right ventricular lipoma

Sağ ventrikül lipomu

Previously healthy 11-year-old male was noted to have a heart murmur during routine physical examination. Transthoracic echocardiogram showed a mass in size of 2x3 cm in the interventricular septum lining toward the right ventricular outflow tract (Fig. 1). Cardiac magnetic resonance imaging (MRI) demonstrated a high signal intensity of the mass on the T1 and T2 black blood weighted image, with the signal intensity being reduced markedly on the fat suppression technique (Fig. 2). The mass was diagnosed as cardiac lipoma without using any invasive technique. Since the patient was asymptomatic and there was no arrhythmia and right ventricular outflow obstruction, we decided to observe him clinically. During one year of follow-up he had not any untoward event.

Cardiac lipomas are very rare benign tumors of encapsulated mature adipose cells. Most tumors are sessile or polypoid and located in the

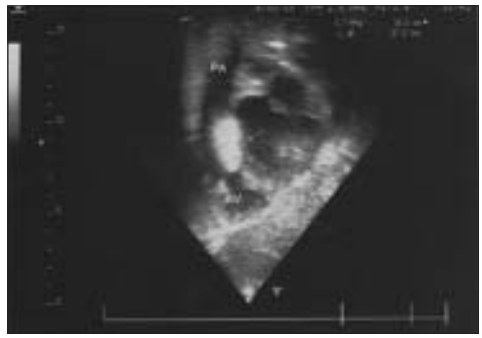

Figure 1. Transthoracic echocardiogram, demonstrating a large mass in the interventricular septum lining toward the right ventricular outflow tract

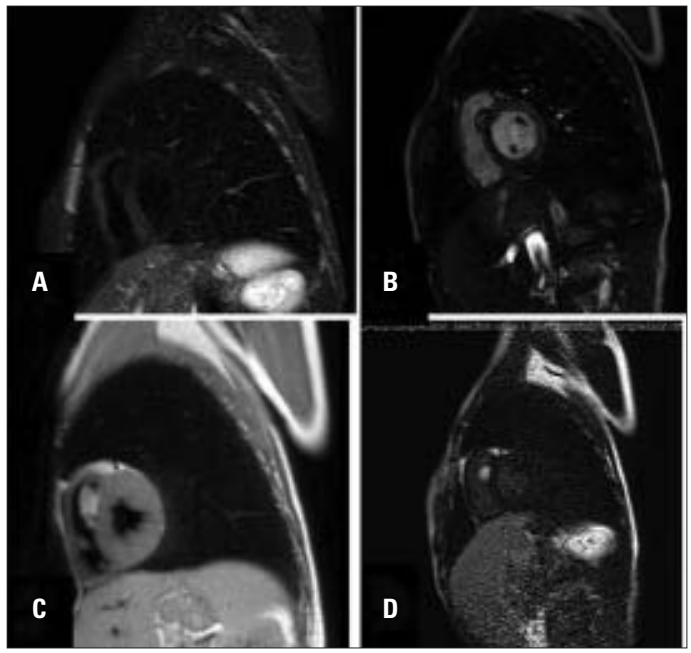

Figure 2. Magnetic resonance imaging of right ventricular lipoma

A - T2 weighted STIR
B - T2 weighted Black blood TSE
C- T1 weighted Black blood TSE
D - post contrast inversion recovery turbo field echo

subendocardium or subepicardium. The most commonly affected sites are left ventricle, right atrium and interatrial septum. The tumor in our case is located in the interventricular septum on the right ventricle side. Magnetic resonance signal characteristics of lipomas are quite specific; lipomas have high signal intensity on T1 and T2 weighted images and their signal are suppressed by fat suppression sequence and by this way cardiac MRI become diagnostic in this case. We described the rare case of a patient with right ventricular. This case underlines the usefulness of MRI for the evaluation of cardiac tumors, particularly lipomas.

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Giant metastatic left atrial tumor leading to pulmonary edema

Akciğer ödemine yol açan dev sol atriyal metastatik tümör

A 52-year-old male patient was referred to our hospital with complaints on worsened shortness of breath and cough. His general examination showed orthopnea and pain with palpation of right upper quadrant, bilateral jugular venous distension and diffuse crepitation rales in both lungs. His personal history revealed cigarette smoking for 30 years. Transthoracic and transesophageal echocardiographic examinations showed a partially mobile homogeneous mass with occasional lobulations completely occupying the left atrium (Fig. 1, Video 1. See corresponding video images at www.anakarder.com). Other heart cavities were in normal size and their functions were normal On his physical examination blood pressure was 120/80 mmHg, heart rate 100 /min and first heart sound was decreased. Telecardiography showed presence of infiltration occupying half of his right lung and cardiothoracic index was increased in favor of the heart. His coronary angiography was normal. Upon worsening of his general condition, he has been referred for urgent surgical operation. During the surgery, a gray-white colored, lobulated, encapsulated mass (6 x 5 x 3 cm) completely occupying the left atrium was excised (Fig. 2). Pneumonectomy was not performed. During the surgery it was observed that the mass was organized and no embolism was present. No complications associated with the mass occurred during and after excision. Pathologic examination of the mass led to a diagnosis of metastatic carcinoma of pulmonary vein origin. Follow-up echocardiography at the

Figure 1. Echocardiography view of the left atrial mass

Figure 2. Pathology specimen of left atrial mass, removed during surgery

postoperative period showed normal findings except for an insignificant mitral regurgitation. The patient with no postoperational complications was discharged with a recommendation for follow-up by oncology outpatient clinic.

While pulmonary edema is a commonly encountered clinical condition, we believe that it is important to consider left atrial metastatic tumors.

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Ball thrombus in ligated left atrial appendage

Bağlanmış sol atriyal apendiks içinde top trombüs

A 40-year-old woman with paroxysmal atrial fibrillation was admitted to our hospital because of shortness of breath (NYHA III), palpitations and fatigue. Fifteen years earlier, the patient had been performed closed mitral commissurotomy. On physical examination, the blood pressure was 100/60 mm Hg and the heart rate was irregular at 95 beats/min. A 12-lead electrocardiogram showed atrial fibrillation. On admission, the patient had jugular venous distention to the angle of the jaw and trace peripheral edema. Full blood count and blood biochemistry were normal. As transthoracic echocardiography showed a suspect thrombus in the left atrium and severe mitral stenosis (mitral valve area=1.4 cm^2, calculated by pressure half-time method), Transesophageal echocardiography (TEE) was performed. The TEE confirmed the presence of a

Figure 1. Transesophageal echocardiography shows ball thrombus in ligated left atrial appendage.
LA - left atrium, LV - left ventricle, T - thrombus