

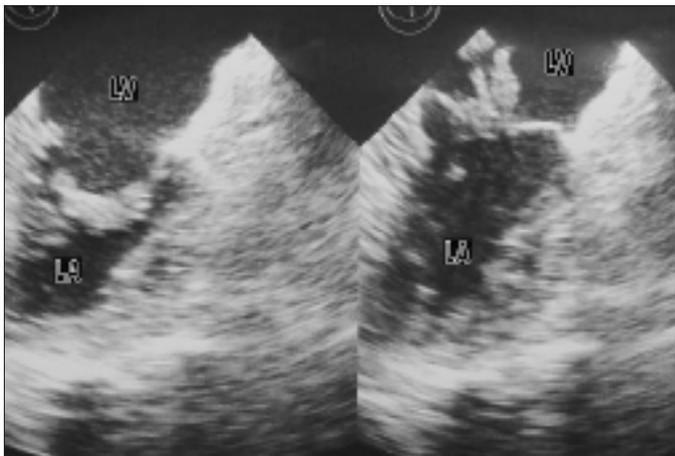
## Intracerebral hemorrhage associated with mycotic aneurysm in a patient with mitral valve endocarditis

*Mitral kapak endokarditi olan bir hastada mikotik anevrizma ile ilişkili intraserebral kanama*

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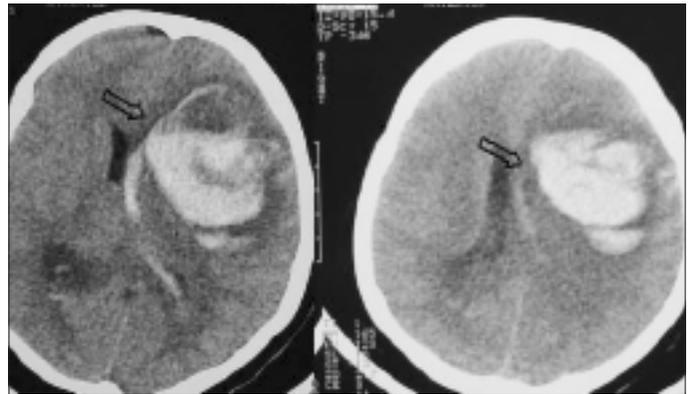
A 41-year-old woman was referred to our department with fever, malaise and a systolic murmur continued for a month. She had no history of any cardiac disease. On physical examination her blood pressure was 90/60 mmHg, heart rate was 110 bpm, body temperature was 38°C and an apical pansystolic murmur of grade 3/6 was heard with auscultation. Sinus tachycardia was noticed on her electrocardiogram (ECG). Laboratory tests revealed erythrocyte sedimentation rate of 90 mm/hr, high sensitive C-reactive protein level of 5.60 mg/dl (normal range: 0.00-0.744 mg/dl) and white blood cell count of 15000/mm<sup>3</sup>. Blood cultures grew no any pathogen. Transthoracic echocardiography showed mobile masses attached to both anterior (1.6 x 0.5 and 1.3 x 0.7 cm) and posterior (0.8 x 0.5 cm) leaflets of the mitral valve extending left atrium during systole and left ventricle during diastole (Fig. 1). There was also a mitral regurgitation of grade 2. Intravenous penicillin G with a dose of 20 million U in 4 divided doses and gentamicin with a dose of 160 mg every 12 hours were started. During follow-up pe-



**Figure 1. Apical 2-chamber view shows vegetations on both anterior and posterior leaflets of mitral valve**

LV, left ventricle; LA, left atrium

riod, the patient suddenly developed headache and then cardiopulmonary arrest. Cranial computed tomography showed an acute large hemorrhagic lesion in the left temporoparietal region causing ventricular compression and shifting (Fig. 2). Because of herniation, surgical approach was not performed. Unfortunately, the patient died. Mycotic aneurysms may occur in patients with infective endocarditis. These inflammatory vascular lesions are generally associated with increased morbidity and mortality caused by spontaneous rupture, which results in intracerebral hemorrhage. In some cases, resolution of mycotic aneurysms was observed with antibiotic therapy. Surgical or percutaneous techniques may be performed for the treatment of aneurysms. Magnetic resonance angiography may be a screening test to detect intracranial mycotic aneurysms in the patients with infective endocarditis, although conventional angiography is the gold-standard technique in clinically suspected cases. In conclusion, in the presence of any suspicion, cerebral angiography should be performed for the detection of mycotic aneurysms. Control angiography is recommended to assess response to antibiotic therapy.



**Figure 2. Cranial computed tomography shows a large hemorrhagic lesion in the left temporoparietal region resulted in compression of lateral ventricle and shifting (arrows)**