

An infective endocarditis case presenting with sudden unilateral loss of vision - the first and single symptom

İlk ve tek semptomu ani tek taraflı görme kaybı olan bir infektif endokardit vakası

Dear Editor,

Despite advances in medical, surgical, and critical care interventions, infective endocarditis (IE) remains to be a disease associated with considerable morbidity and mortality. Systemic embolization is an important complication and occurs in 22% to 50% of cases of IE (1). Valvular vegetations can release emboli and lead to episodes of amaurosis fugax or retinal artery occlusion (2).

A 20-year-old female was referred to the ophthalmology unit of our faculty by an ophthalmologist. She applied to with the complaint of painless, sudden and complete loss of vision in her left eye occurring four days ago. Cardiologic consultation was asked for the patient diagnosed with left central retinal artery occlusion during her ophthalmologic investigation to search for the source of emboli.

On her physical examination, patient's general condition was good, with respiratory rate of 16 rpm, pulse rate of 120 bpm, blood pressure of 150/90 mmHg and fever (37.7°C/ 99.9°F). Along with rhythmic, but tachycardic normal heart sounds, there was a 3-4/6 systolic murmur being more evident on the left sternal border. As a mass image suggesting that there was vegetation on the posterior leaflet of the mitral valve and serious mitral insufficiency

was detected by transthoracic echocardiography, transesophageal echocardiography (TEE) was performed. Vegetation in size of 0.7x1.0 cm on the posterior leaflet of the mitral valve was detected on TEE (Fig. 1). Moreover, mitral posterior valve was seen to be flail due to its chordae rupture. The patient was considered to have infective endocarditis with these findings.

Definite vegetation on the posterior leaflet of the mitral valve and ruptured chordae were demonstrated during operation (Fig. 2). The patient could not be treated for her loss of vision due to very late medical care seeking.

Peripheral embolism is more related to infective endocarditis of the left chambers (more prevalent in infective endocarditis of the mitral valve than that of the aortic valve) in the presence of highly mobile large vegetations (3, 4). The highest indices of peripheral embolism occur when the vegetations are adhered to mitral anterior leaflet; when the vegetations are located in the posterior leaflet, as in our patient, the indices are lower (5).

Symptomatic or asymptomatic retinal arteriolar emboli can be witnessed in approximately 1% of adults over 40 years of age, and are generally associated with plaque and/or stenosis in carotid artery, hypertension, cigarette smoking and diabetes mellitus. Yet, as is in our case, IE can also lead to retinal artery emboli rarely. In a young

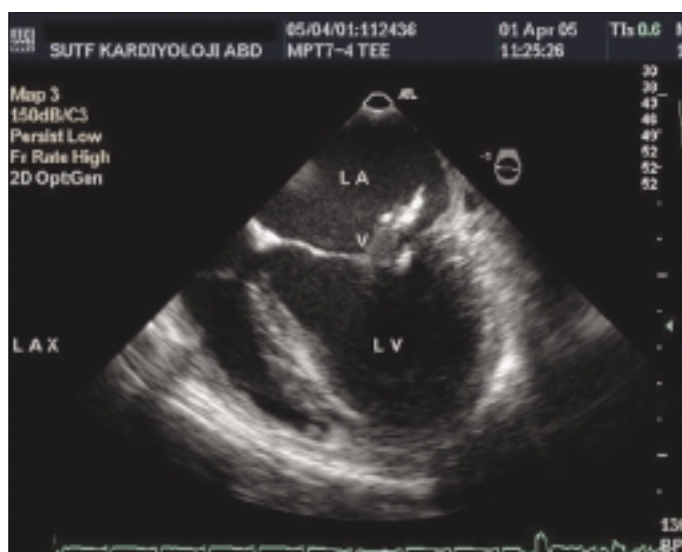


Figure 1. Transesophageal echocardiography view of the vegetation (V) on the posterior leaflet of the mitral valve
LA - left atrium, LV - left ventricle



Figure 2. The intraoperative view of ruptured chordae and vegetation

woman having no other risk factors for retinal artery emboli, infective endocarditis case in which sudden and complete loss of vision occurred in one eye as a first and only symptom due to retinal artery emboli has not yet been recorded in the literature we can reach.

This case is thought to be important in respect to indicating that infective endocarditis can be present unexpectedly and that unless there are any other reasons, every patient applying to hospital for an embolic phenomenon should be assessed by taking infective endocarditis into consideration.

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