

Enterococcus gallinarum endocarditis: high-grade atrioventricular block as a early sign of bioprosthetic aortic valve endocarditis and aortic root abscess

Enterokokkus gallinarum endokarditi: Biyoprotez aort kapak endokarditi ve aort kök apsесinin erken bir işareтçisi olarak yüksek dereceli atriyoventriküler blok

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Perivalvular abscess is a fatal complication of infective endocarditis. A perivalvular abscess can cause cardiac conduction disturbances if it spreads to the His bundle or an atrioventricular node. In this article, we describe a case of a patient with bioprosthetic aortic valve endocarditis complicated by high-grade atrioventricular block secondary to an aortic root abscess.

A 60-year-old male patient with a bioprosthetic aortic valve replacement history of seven years presented to our clinic with persistent fever and recurrent syncopal episodes. The patient had received two months of antibiotic therapy without a decrease in fever symptoms. His physical examination revealed that his fever was 38 °C and a 3/6 intensity diastolic aortic murmur was heard in cardiac auscultation. Laboratory examinations showed high C-reactive protein levels and leukocytosis. A 12-lead electrocardiogram revealed high-grade atrioventricular block and bifascicular block with a heart rate of 47 beats/minute (Figure 1). Transthoracic echocardiography showed moderate to severe, eccentric aortic regurgitation and a 6x11 mm mobile vegetation on the bioprosthetic aortic valve. Transesophageal echocardiography showed mobile vegetation of the bioprosthetic aortic valve, moderate to severe, eccentric aortic regurgitation, and a 14x34 mm aortic root abscess adjacent to a non-coronary cusp (Figures 2a-d). *Enterococcus gallinarum* species were isolated from the patient's blood cultures. The patient was transferred to the cardiovascular surgery clinic with a diagnosis of bioprosthetic aortic valve endocarditis, aortic root

abscess, and moderate to severe aortic regurgitation. The postoperative macroscopic appearance of the prosthetic valve was consistent with root abscess. Postoperative transthoracic echocardiography showed that the prosthetic aortic valve had normal function, and the patient was discharged from the hospital.

Extension of an aortic root abscess may involve the conduction system, resulting in conduction disturbances.^[1] Bundle branch block, fascicular block and atrioventricular block are some of the conduction abnormalities noted in the setting of perivalvular abscess. The presence of a new-onset atrioventricular block or other conduction disturbances in a patient

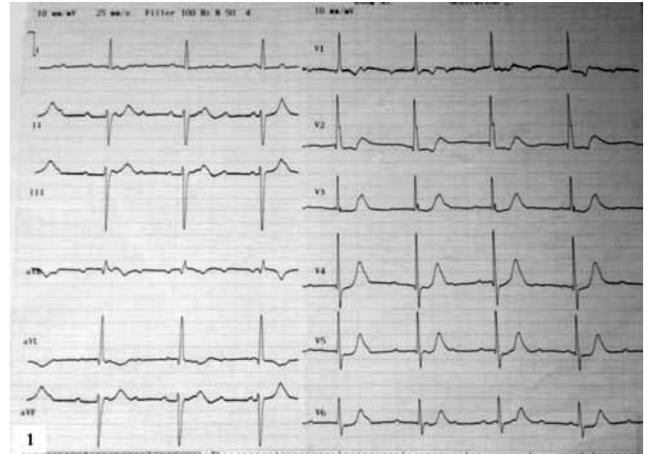


Figure 1. A 12-lead electrocardiogram revealed high-grade atrioventricular block and bifascicular block with a heart rate of 47 beats/minute.



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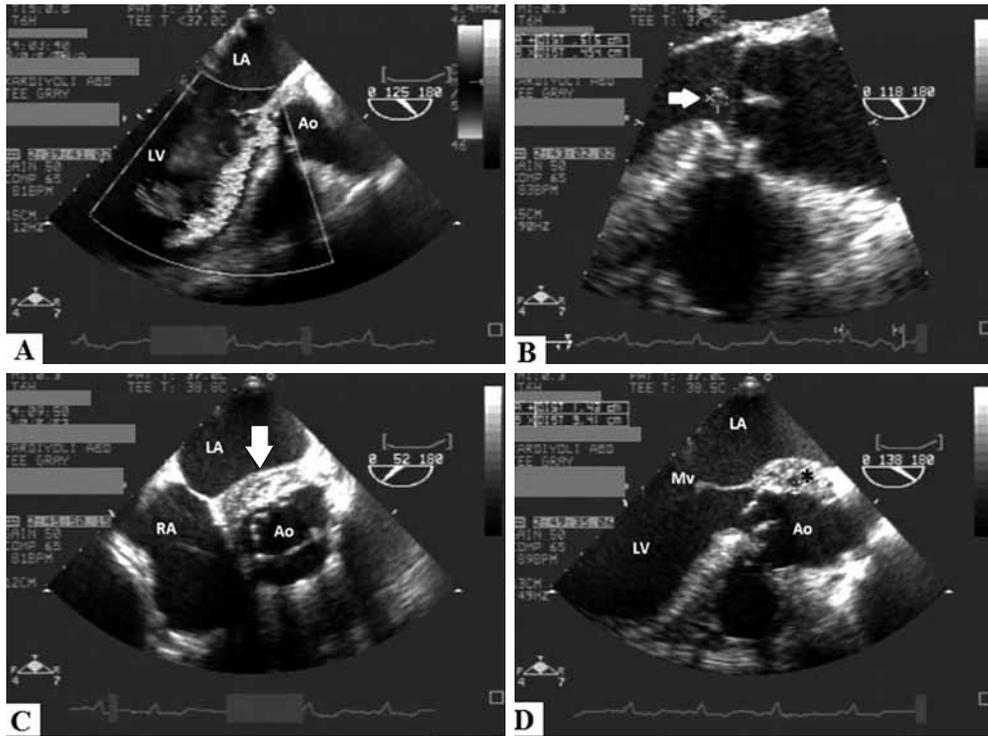


Figure 2. (a) Transesophageal echocardiography 125° view showed moderate to severe eccentric aortic regurgitation. (b) Transesophageal echocardiography 118° view showed mobile aortic vegetation. (c) Transesophageal echocardiography mid-esophageal aortic short-axis view and (d) mid-esophageal two-chamber view revealed perivalvular aortic abscess (white arrow and asterisk).

with infective endocarditis should alert the physician for the possibility of a perivalvular abscess.^[2]

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