

Figure 2. A) The coronary balloon over a floppy coronary wire in the LAD was shown. B) A 26-mm Edwards Sapien XT aortic bioprosthesis was successfully implanted C) Control angiography showed patent LMCA. D) Control aortography revealed successfully implanted aortic bioprosthetic valve with patent coronary arteries

LAD - left anterior descending artery, LMCA - left main coronary artery

Control angiogram during aortic balloon angioplasty may be beneficial to take appropriate measures to handle with probable complications including LMCA obstruction during the TAVI.

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Video 1. The calcified left coronary cusp partially obstructed the left main coronary ostium during the aortic balloon valvuloplasty

Video 2. A floppy coronary wire was advanced through the LMCA to the left anterior descending coronary artery and a 3.0x15 mm coronary balloon was crossed to the LAD over the guidewire

LAD - left anterior descending artery, LMCA - left main coronary artery

Video 3. A 26-mm Edwards Sapien XT (Edwards Lifesciences, Irvine, California) aortic bioprosthesis) was successfully implanted

Video 4. Control angiography showing patent LMCA

LMCA - left main coronary artery

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Left atrial appendix thrombus presenting with acute coronary syndrome in a patient with rheumatic mitral stenosis

Romatizmal mitral darlığı olan ve akut koroner sendrom ile başvuran hastada sol atriyal apendiks trombüsü

A 32-year-old female patient presented with a typical angina of 4-hour duration. She had a history of rheumatic mitral valve disease and had suffered from intermittent palpitations for a month. Physical examination revealed a 2/6 diastolic murmur. The surface electrocardiogram revealed atrial fibrillation with 0.5-1 mm ST segment elevation in leads DIII and aVF. Troponin I level was 0.83 mg/dL. On transthoracic echocardiographic examination (TTE), left ventricular ejection fraction was normal but there was mitral stenosis (mitral valve area: 1.45 cm², maximal/mean gradient: 18/ 8 mmHg), moderate level of mitral regurgitation and mild tricuspid regurgitation (pulmonary artery systolic pressure was estimated 40 mm Hg) (Video 1. See corresponding video/movie images at www.anakarder.com). Acetyl salicylic acid (ASA), clopidogrel and unfractionated heparin (UFH) therapy was initiated. Coronary angiography showed that the patient had normal coronary arteries except for a total occlusion in the distal obtuse marginal branch of circumflex artery (Fig. 1 A, B and Video 2. See corresponding video/movie images at www.anakarder.com). A thrombus and spontaneous echo contrast was revealed in the left atrial appendix (LAA) by 2D and 3D transesophageal echocardiographic examination (TEE) (Fig. 2 A-C and Video 3, 4. See cor-

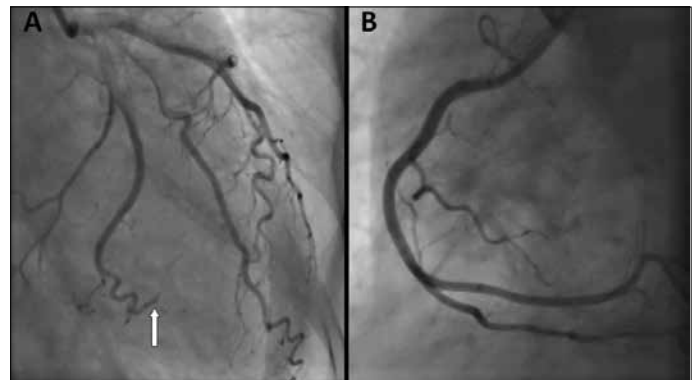


Figure 1. A) Right anterior oblique view of left coronary system. The arrow indicates total occlusion in the distal obtuse marginal branch of circumflex artery. B) Right anterior oblique view of right coronary artery

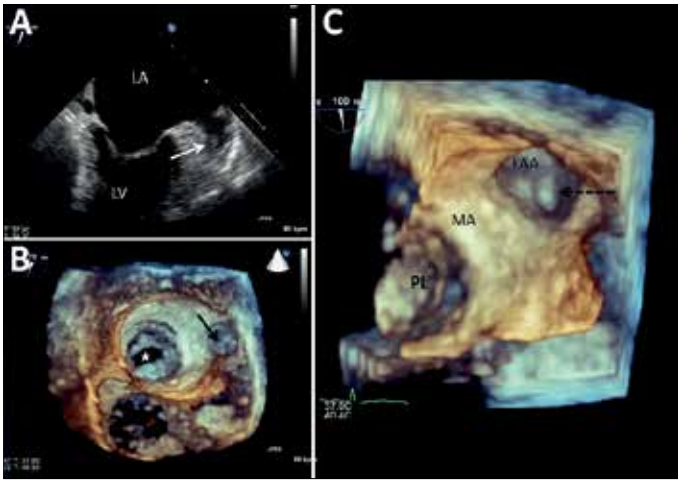


Figure 2. 2D (A) and 3D (B and C) transesophageal echocardiographic views of a thrombus (arrows) in left atrial appendix (LAA)

LA - left atrium, LV - left ventricle, MA - mitral annulus, PL - posterior mitral valve leaflet

responding video/movie images at www.anakarder.com). Since the patient had no risk factors and was only 32 years old, we assumed that the thrombus from the LAA had probably embolized the distal coronary artery. We decided to follow up the patient for mitral valve and coronary artery disease. She was discharged with B-blocker, angiotensin converting enzyme inhibitor and warfarin therapy.

Common cardiac causes of systemic embolism are ventricular mural thrombus, LAA thrombus secondary to valvular pathology or chronic atrial fibrillation, prosthetic valves or calcified leaflets, cardiac tumors, infective endocarditis, paradoxical embolism through an atrial septal defect or patent foramen ovale (1). In patients with mitral stenosis, systemic embolization of an atrial thrombus is rather frequent and the incidence is 10-20% (2). The risk of embolization increases with atrial fibrillation and age; however, embolization can be seen even in patients with sinus rhythm (3). Prevalence of coronary embolization in patients with mitral stenosis is unknown but a few cases have been reported in literature (4).

Although the arterial embolization in mitral stenosis is frequent, coronary emboli is rare due to the origination of the coronary ostia just behind the cusps of aortic valve, angulations of the coronary arteries and high velocity of the flow in the proximal aorta. Circumflex artery runs at a 90-degree angle from the left main coronary artery, and as a result, embolizations to the left system involving the circumflex artery are rare (5).

Diagnostic challenge in patients thought to have coronary embolism originates from the difficulty to distinguish whether the thrombus had embolized to the coronary bed, or was formed in the coronary arteries due coronary atherosclerosis and other in situ causes. Risk factors, history of hereditary coagulopathies, presence of atherosclerosis and as we have experienced in our case, the predisposition for cardiac thrombus formation could help in this situation. Moreover, intravascular ultrasound (IVUS) could be used to distinguish between ACS due to plaque rupture and coronary embolization.

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Video 1. On transthoracic echocardiographic examination (TTE), left ventricular ejection fraction was normal but there was mitral stenosis

Video 2. Coronary angiography showed that the patient had normal coronary arteries except for a total occlusion in the distal obtuse marginal branch of circumflex artery

Video 3. 2D-Transesophageal echocardiogram showing left atrial appendix thrombus and spontaneous echo contrast in LAA

LAA - left atrial appendix

Video 4. 3D-Transesophageal echocardiogram showing left atrial appendix thrombus and spontaneous echo contrast in LAA.

LAA - left atrial appendix

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Psychological problems in patients awaiting coronary angiography: a preliminary study

Koroner anjiyografiyi bekleyen hastalarda psikolojik problemler: Bir ön çalışma

Coronary angiography (CA) is the gold standard for diagnosis of coronary artery disease (CAD) (1, 2). Currently, in many centers in Iran CA has become a main diagnostic procedure for diagnosis of CAD (1). CA is very stressful procedure for most patients (3). Patients experience psychological problems and consequently hemodynamic instability in response to an invasive CA (2, 4). Many studies investigated patients' anxiety before CA and used of interventions to reduce this problem (3, 5), but assessment of stress, anxiety and depression of patients awaiting elective CA in our country has not yet been investigated.

The present study is a descriptive cross sectional study conducted in southeast Iran. From January to April 2009, patients aged 25 to 75 years, free of known psychiatric disorders, without history of previous CA and free of taking psychotropic drugs recruited for this study. After admission to the ward, the purpose of the study was explained. In addition, informed written consent form was completed by all the patients. Psychological variables as stress, anxiety and depression were collected by interview. The depression, anxiety, stress scale -21 (DASS-21) was used for assessment of psychological problems. This tool is a widely used scale for measuring depression, anxiety and stress in adults (4). For analysis of data, frequencies, mean and standard deviation were reported. Chi-square test and correlation coefficient test