Rekurentni embolizacijski infarkti miokarda u bolesnika s mehaničkim aortnim zaliskom

Recurrent myocardial infarction due to coronary artery embolisms in a patient with an artificial aortic valve

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Uvod: Akutna embolizacija koja dovodi do akutnog infarkta miokarda s ishodištem u mehaničkom aortnom zalisku je rijetka pojava. U literaturi su opisani klinički slučajevi s embolizacijom u akutnom periodu nakon zamjene aortnog zaliska, dok se embolizacija kod adekvatno antikoaguliranih bolesnika godinama nakon zamjene aortnog zaliska rijetko opisuje.^{1,2}

Prikaz bolesnika: Prikazujemo 64-godišnjeg muškarca, sa zamijenjenim aortnim zaliskom prije šest godina, adekvatno antikoaguliran, a prezentiran u hitnoj službi pod kliničkom slikom akutnog infarkta miokarda bez ST elevacije. Transtorakalnom ehokardiografijom prikazana je uredna pomičnost dvolisnog mehaničkog aortnog zaliska, bez vidljivih tromba ili povišenih vrijednosti transvalvularnih tlakova. U 12 kanalnom elektrokardiogramu (EKG) je zabilježena depresija ST-segmenta u inferiornim i lateralnim odvodima, dok se koronarografijom prikaže aterotrombotska signifikantna lezija desne koronarne arterije, bez značajnih promjena na ostalim koronarnim arterijama. U istom aktu je učinjena perkutana koronarna intervencija desne koronarne arterije s implantacijom stenta. Ponavljanjem EKG-om se prikaže ST-segment u izoelektričnoj liniji. Četvrti dan hospitalizacije uz bolove u prsima bilježi se duboka depresija ST-segmenta u anterolateralnim odvodima. Predloženu koronarografiju bolesnik je odbio. Bolesnik je umro dan poslije nakon refraktornog srčanog zastoja. Obdukcijom je pronađena okluzija LAD-a uz nekrozu miokarda prednje stijenke lijeve klijetke i trombima u području aortnog mehaničkog zaliska.

Diskusija: Embolizacija iz područja mehaničkog aortnog zaliska s posljedičnim infarktom miokarda je podcijenjena. Važno je otkriti izvor embolusa i liječiti uzrok. Smatra se da i unatoč adekvatnoj antikoagulaciji rizik od razvoja embolusa nije u potpunosti eliminiran. Smatra se da dvolisni zalisci imaju manji trombotski potencijal što čini manju vjerojatnost od embolizacije. Pregledom literature nisu pronađeni slični prikazi bolesnika, kod kojih bi se u tako kratkom vremenu, razvili recidivirajući infarkti miokarda s lezijama u različitim koronarnim arterijama.

Introduction: Acute embolism from artificial aortic valve to the coronary arteries resulting in acute myocardial infarction is an uncommon occurrence. There are cases reported in acute setting after mechanical aortic valve replacement, although embolization in properly anticoagulated patients, years after aortic valve replacement is rare.^{1,2}

Case report: We report the case of a 64-year-old man who underwent an aortic valve replacement six years earlier and presented to the emergency department with myocardial infarction without ST elevation. He was adequately anticoagulated with warfarin. Transthoracic echocardiography showed normal motion of bileaflet artificial aortic valve, without visualized thrombi or detected abnormally pressure gradient. 12-lead ECG showed ST depression in inferior and lateral leads, while urgent coronary angiography revealed subtotal atherothrombotic lesion of right coronary artery, but without significant coronary artery disease of left coronary artery. Percutaneous coronary intervention of right coronary artery was performed with implantation of one stent. Repeated ECG showed isoelectric level of ST segment. After four days of hospitalization sudden onset of prodromal chest pain occurred. ECG showed deep ST depression in anterolateral precordial leads. Coronary angiography was proposed to the patient, but the patient denied the procedure. One day later, after refractory cardiac arrest, patient died. Autopsy revealed thrombotic occlusion of left anterior descending artery with recent myocardial necrosis of left ventricle anterior wall and few microemboli of the aortic mechanical valve.

Discussion: Embolic myocardial infarction is underdiagnosed and it is important to diagnose the source of embolism and treat the cause. Despite the patient was adequately anticoagulated, it is considered that even adequate anticoagulation therapy does not eliminate the risk of thromboembolism. Also, favorable in this patient was bileaflet type of valve, which is less thrombogenic. Review of related literature did not show similar cases occurring in relatively short period of time, resulting in recurrent myocardial infarction with emboli of both left and right coronary artery.

LITERATURE

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