Rotablacija u akutnom infarktu miokarda bez elevacije ST-segmenta: prikaz slučaja

Rotational atherectomy in acute non-ST-segment elevation myocardial infarction: a case report

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KLJUČNE RIJEČI: rotablacija, lezija, balon.

KEYWORDS: rotablation, lesion, balloon.

CITATION: Cardiol Croat. 2018;13(11-12):397. | https://doi.org/10.15836/ccar2018.397

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Uvod: Značajno kalcificirane ili fibrozno promijenjene koronarne lezije i dalje predstavljaju izazov za intervencijske kardiologe, osobito u akutnom koronarnom sindromu. Rotacijska aterektomija (rotablacija, RA) koronarnih arterija ne upotrebljava se tako često u visoko aktivnom trombotskom stanju kao što je akutni infarkt miokarda (AIM) zbog rizika od dodatne trombotske aktivacije rotablatora.[1-3]

Prikaz slučaja: 51-godišnji muškarac s anamnezom arterijske hipertenzije i šećerne bolesti hospitaliziran je zbog infarkta miokarda bez elevacije ST-segmenta. Njegov GRACE skor bio je 106 i sljedeći dan učinjena je koronarografija. Verificirana je dvožilna koronarna bolest srca sa značajnom kalcificiranom stenozom lijeve prednje silazne arterije (LAD). Ehokardiogram je pokazao reduciranu istisnu frakciju lijeve klijetke s hipokinezijom prednje stijenke i sniženim globalnim longitudinalnim „strainom" (GLS). Bolesnik je prikazan na konziliju srčanog tima gdje je zbog izrazito kalcificirane LAD i u području eventualne „landing" zone premosnice, odlučeno da se napravi perkutana koronarna intervencija (PCI) s RA LAD-a, kao bolja opcija. Sljedeći dan učinjena je PCI s RA LAD-a i PCI prve marginalne grane. Bolesnik je zahvat dobro podnio te je otpušten iz bolnice nakon tri dana.

Zaključak: U AIM-u nailazimo na oko 8% kalcificiranih lezija, a jedna četvrtina istih nije podobna za predilataciju balonom, koja je otežana ili najčešće neizvediva. Stoga, RA može ponekad biti jedina opcija kod infarktom zahvaćenih žila koje su nepodesne dilataciji/prolasku balona. Iz navedenog prikaza, metoda je sigurna i izvediva u akutnom koronarnom sindromu s dobro uvježbanim timom koji izvodi kompleksne dilatacije.

Introduction: Heavily calcified or fibro-calcified stenotic lesions have remained challenging for interventional cardiologists, especially in an acute coronary syndrome setting. Rotational atherectomy (rotablation, RA) of coronary artery is not so often used in high thrombotic state such as acute myocardial infarction (AMI) because of the risk of platelet activation by the rotablator.[1-3]

Case report: 51-year-old man with arterial hypertension and diabetes mellitus in his previous medical history presented with non-ST-segment elevation myocardial infarction. His GRACE score was 106 and the next day he underwent coronary angiography. Double vessel coronary artery disease was found with calcified significant stenosis of the left anterior descending (LAD) artery. His echocardiogram showed reduced systolic function of left ventricle, hypokinetic anterolateral wall with reduced global longitudinal strain (GLS). He was presented to the Heart team and the decision was made to do percutaneous coronary intervention (PCI) with RA to the LAD, due to calcified LAD in the area of lending zone for possible left internal mammary artery (LIMA) graft. The following day PCI with RA to LAD and PCI to first obtuse marginal branch (OM1) were done. The patient improved remarkably after the procedure, and was discharged after 3 days.

Conclusion: As known, calcified lesions could be found in 8% of patients with AMI, and one-quarter of them were balloon un-dilatable or un-crossable and the PCI is therefore difficult or impracticable. As seen, RA is safe method in acute coronary syndrome (ACS) when it is done by well-trained team experienced in complex PCI's.

RECEIVED:
October 28, 2018

ACCEPTED:
November 5, 2018

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