

Transapikalna transkateterska implantacija aortnog zaliska i perkutana koronarna intervencija u bolesnika s porculanskom aortom

Transapical transcatheter aortic valve implantation and percutaneous coronary intervention in a patient with porcelain aorta

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Uvod: Osim standardne kardiokirurške zamjene aortnog zaliska (SAVR), transkateterska zamjena (TAVI) pruža sigurnu alternativu, osobito kod bolesnika s povećanim rizikom zbog prisutnih drugih komorbiditeta. Drugi komorbiditeti često utječu i na odabir pristupa TAVI-a^{1,2}.

Prikaz: 73-godišnji bolesnik, s ranije preboljelim infarktom miokarda i učinjenim aortokoronarnim premoštenjem (CABG) 1997. godine (LIMA-LAD, VSM-PD,OM2), hospitaliziran je u veljači 2013. godine zbog sinkope i bolova u prsima. Ehokardiografski je utvrđena teška aortna stenozna. Koronarografijom se prikazuju okludirane venske prenosnice i subokludirana cirkumfleksna arterija, kao i LIMA-LAD prenosnica. Ostale koronarne arterije su bile difuzno značajno promijenjene, nepogodne za perkutanu koronarnu intervenciju (PCI). Također je dokazana i signifikantna stenozna karotidnih arterija. Bolesniku je predložena sinkrona trombendarrektomija karotidnih arterija, kardiokirurška zamjena aortnog zaliska i kardiokirurška ponovljena revaskularizacija miokarda. U lipnju 2013. godine učinjen je uspješan zahvat na karotidnim arterijama, dok SAVR i re-CABG nije bilo moguće učiniti zbog porculanske aorte. Zbog perzistentnih anginoznih tegoba, PCI cirkumfleksne arterije i LIMA-LAD prenosnice je uspješno učinjen. Nakon PCI-a bolesnik je bio bez anginoznih tegoba, no ehokardiografski se bilježi redukcija sistoličke funkcije do umjerenog stupnja. 2014. godine transapikalnim pristupom je učinjen TAVI, s obzirom da zbog značajne periferne arterijske bolesti transfemoralnim pristupom nije bio moguć (prvi hrvatski TAVI transapikalnim pristupom). 2015. godine zbog tahikardno-bradikardne forme fibrilacije atrija uz značajne asistoličke pauze implantiran je trajni elektrostimulator. U razdoblju praćenja zabilježen je oporavak sistoličke funkcije lijeve klijetke te je bolesnik bio bez anginoznih tegoba.

Zaključak: TAVI i PCI predstavljaju sigurnu alternativu SAVR i CABG u odabranih visokorizičnih bolesnika s porculanskom aortom. U inoperabilnih bolesnika, koji nisu kandidati za transfemoralni TAVI, s prisutnom značajnom koronarnom bolesti srca uz ranije učinjeno aortokoronarno premoštenje, potrebno je razmotriti alternativan pristup TAVI-u, kojim se uz PCI može postići odličan rezultat.

Introduction: In addition to standard surgical aortic valve replacement (SAVR), transcatheter implantation (TAVI) provides a safe alternative, particularly in patients with an increased risk due to the presence of other comorbidities. Other comorbidities also influence on selection of the TAVI access^{1,2}.

Case report: 73-year-old male patient, with prior history of myocardial infarction and coronary artery bypass grafting (CABG) – (LIMA-LAD – left internal mammary artery to left anterior descending artery; SVG-PD, OM2 – saphenous vein graft to posterior descending artery and second left marginal artery) in 1997, was admitted to University Hospital in February 2013 due to syncope and chest pain. Echocardiography revealed severe aortic stenosis. Coronary artery angiography showed occluded venous bypass grafts and suboccluded circumflex artery (CX) and left internal mammary artery graft (LIMA). Other coronary arteries were completely atherosclerotically changed and inappropriate for percutaneous coronary intervention (PCI). Significant carotid artery disease has been shown. The patient was prepared for synchronous carotid thrombendarterectomy, surgical aortic valve replacement, and re-CABG. In June 2013 carotid procedure was performed, while SAVR and re-CABG could not be done due to porcelain aorta. Due to prolonged chest pain, PCI of CX and LIMA graft was done. After PCI the patient was free of chest pain but left ventricle (LV) function decreased to moderately reduced ejection fraction. Transfemoral approach for transcatheter aortic valve implantation (TAVI) could not be used due to significant peripheral artery disease. In 2014 transapical (first Croatian) TAVI was done. In 2015 due to tachy-brady syndrome permanent pacemaker was implanted. In the follow-up period, LV function significantly improved and the patient was free of chest pain.

Conclusion: TAVI and PCI are safe alternatives to SAVR and CABG in selected high-risk patients with porcelain aorta. In inoperable patients, who are not candidates for transfemoral TAVI and concomitant significant coronary artery disease with previously performed CABG, careful selection of alternative access options, following PCI can lead to excellent results.

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