

Balonska aortna valvuloplastika – jednogodišnje iskustvo sa zaboravljenom tehnikom

Balloon aortic valvuloplasty – one-year experience of a forgotten technique

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RECEIVED:
September 25, 2016

ACCEPTED:
October 10, 2016



KLJUČNE RIJEČI: balonska aortna valvuloplastika, aortna stenozna, transkateterska ugradnja aortne proteze.

KEYWORDS: balloon aortic valvuloplasty, aortic stenosis, transcatheter aortic valve implantation.

CITATION: *Cardiol Croat.* 2016;11(10-11):459. | DOI: <http://dx.doi.org/10.15836/ccar2016.459>

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Balonska aortna valvuloplastika (BAV) može se koristiti u visokorizičnih bolesnika s teškom aortnom stenozom i privremenom kontraindikacijom za hitnu intervenciju¹ te služi kao kratkoročan stabilizirajući postupak sa slabim dugoročnim ishodom². Međutim, kao terapija premoštenja, povezana je s brzim kliničkim i/ili funkcionalnim poboljšanjem koje omogućuje kvalificiranost većine bolesnika za definitivno invazivno liječenje, što uključuje kiruršku zamjenu aortnog zaliska ili transkatetersku ugradnju aortne proteze (TAVI). TAVI se pojavio kao izvrsno alternativno rješenje liječenja loših kirurških kandidata pa se očekuje da će se i broj postupaka BAV u bliskoj budućnosti povećavati. Prema našim saznanjima, BAV se u posljednjih nekoliko godina u Hrvatskoj koristi sporadično. S obzirom da institucionalna praksa i liječničke predrasude/sklonosti mogu bitno utjecati na odabir bolesnika i pristup liječenju teške aortne stenozne, od iznimne je važnosti imati ustanovu koja može (posebno u eri TAVI-ja) ponuditi BAV kao dodatnu opciju liječenja bolesnika čiji bi rizik za intervenciju na aortnom zalisku inače bio smatran neprihvatljivo visokim. Ovdje predstavljamo kratki pregled našeg jednogodišnjeg iskustva s BAV-om nakon ponovnog sustavnog uvođenja metode koje je pratilo razvoj TAVI programa u Kliničkom bolničkom centru Zagreb.

Korištena je klasična retrogradna tehnika upotrebom 11 F femoralne uvodnice, privremene transvenske elektrostimulacije srca i lijevog transradijalnog pristupa za mjerenje tlaka u uzlaznoj aorti. Rezultati postupaka provedenih na 13 bolesnika (7 muškaraca, 6 žena) dobi između 51 i 90 godina (prosječno 78 godina) i prosječne ejijske frakcije lijeve klijetke od 30% vrlo su obećavajući. Prosječna površina aortnog zaliska (AVA) porasla je sa $0,61 \pm 0,17 \text{ cm}^2$ na $0,83 \pm 0,24 \text{ cm}^2$ uz akutni pad srednjeg transaortnog gradijenta sa $37 \pm 18 \text{ mm Hg}$ na $26 \pm 13 \text{ mm Hg}$. Od ozbiljnih komplikacija, nisu zabilježeni slučajevi intraproceduralne smrti, moždanog udara, okluzije koronarnih arterija, teške aortne regurgitacije, tamponade ili potrebe za trajnim elektrostimulatorom srca. Vaskularna komplikacija dogodila se u 1 bolesnika (neokluzivna disekcija femoralne arterije). Reanimacija/defibrilacija učinjena je u 1 slučaju. 30-dnevna smrtnost iznosila je 15,4%.

LITERATURE

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Balloon aortic valvuloplasty (BAV) may be used in high-risk patients with severe aortic stenosis and temporary contraindications to immediate intervention¹. It serves as a brief temporizing procedure with a poor long-term outcome²; however, as a bridge therapy, it is associated with rapid clinical and/or functional improvement allowing eligibility of majority of these patients for definitive invasive treatment, including surgical aortic valve replacement or transcatheter aortic valve implantation (TAVI). TAVI has emerged as an excellent alternative treatment for poor surgical candidates and the number of BAV procedures is expected to increase in the near future. To our knowledge, BAV has been used sporadically in the past years in Croatia. As institutional practices and physician biases can affect patient selection and management approaches to severe aortic stenosis, it is important to have the facility that can offer BAV (especially in the TAVI era) as another management option for patients who would otherwise have been considered unacceptably high risk for aortic valve intervention. We present a short overview of our one-year experience upon systematic BAV reinstitution, following the development of a TAVI programme in University Hospital Centre Zagreb.

The classic retrograde technique using 11 F femoral arterial sheath, transvenous temporary cardiac pacing and left transradial approach for ascending aorta pressure monitoring was used. The results of the procedures conducted on 13 patients (7 male, 6 female) between 51 and 90 years of age (78 years on average) and mean left ventricular ejection fraction 30% were very promising. The mean aortic valve area increased from $0.61 \pm 0.17 \text{ cm}^2$ to $0.83 \pm 0.24 \text{ cm}^2$ with an acute drop of the mean transaortic gradient from $37 \pm 18 \text{ mmHg}$ to $26 \pm 13 \text{ mmHg}$. Among serious adverse events there were no cases of intraprocedural death, stroke, coronary occlusion, severe aortic regurgitation, tamponade or need for permanent pacemaker. Vascular complication occurred in 1 patient (non-occlusive femoral artery dissection) and resuscitation/cardiopercutaneous was done in 1 patient. 30-day mortality was 15.4%.