

Kritična dekompenzirana aortna stenozna – kaskadni pristup rješenju

Critical decompensated aortic stenosis – a cascading approach to treatment

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91-godišnja bolesnica primljena je zbog simptoma i znakova srčanog popuštanja. Transtorakalnom ehokardiografijom (slika 1) je utvrđena teška aortna stenozna (maksimalni sistolički gradijent 122 mmHg, srednji 62 mmHg, AVA 0,4-0,5 cm²) uz srednje tešku mitralnu i trikuspidnu regurgitaciju, reduciranu sistoličku funkciju lijeve klijetke (LVEF oko 30%) i visoku plućnu hipertenziju (PAP 90-95 mmHg). Koronarografijom je isključena značajnija koronarna bolest srca. Zbog visoke životne dobi i teško narušenog funkcionalnog statusa (NYHA III/IV), operativni zahvat zamjene aortne valvule je procijenjen kao visoko rizičan te je odlučeno da se učini transkateterska implantacija aortne valvule (TAVI), a slučaj bolesnice je prikazan Radnoj skupini za TAVI. U međuvremenu je učinjena uspješna balonska aortna valvuloplastika (BAV), s posljedičnim padom gradijenta između lijeve klijetke i aorte s 91 na 52 mmHg, bez značajnije aortne regurgitacije. Nakon BAV-a te uz intenziviranje diuretske terapije, postiže se znatno volumno rasterećenje lijeve klijetke te funkcionalni oporavak. Šest mjeseci kasnije, bolesnici je uspješno učinjen TAVI transfemoralnim pristupom (CoreValve 26). Kontrolni ehokardiografski pregled (slika 2) ukazuje na oporavak sistoličke funkcije lijeve klijetke (LVEF 50-55%) uz urednu funkciju valvule (maksimalni sistolički gradijent 24 mmHg, srednji 10 mmHg), umjerenu mitralnu i blagu trikuspidnu regurgitaciju te smanjenje tlakova u plućnoj cirkulaciji (PAP 45 mmHg). Bolesnica je otpuštena 7. postintervencijski dan, samostalno pokretna, u NYHA II funkcionalnom statusu.

Balonska dilatacija aortne valvule može vrlo uspješno premostiti razdoblje do definitivne odluke o nastavku liječenja teške aortne stenozne. Čak i u vrlo visokoj životnoj dobi, olakšanje simptoma u fazi terminalnog zatajivanja srca nakon BAV-a podiže kvalitetu života te nam daje mogućnost da ove bolesnike podvrgnemo tehnički zahtjevnijim, ali dugoročnijim zahvatima. Pri tome je ključna uloga timskog rada i odlučivanja.¹

91-year-old patient was admitted with symptoms and signs of heart failure. Transthoracic echocardiography (Figure 1) revealed severe aortic stenosis (max gradient 122 mmHg, mean 62 mmHg, AVA 0.4-0.5 cm²), moderate-severe mitral and tricuspid regurgitation, reduced left ventricular systolic function (LVEF 30%) and high pulmonary hypertension (PAP 90-95 mmHg). Coronary angiography showed no significant coronary artery disease. Due to age and poor functional status (NYHA III/IV), aortic valve surgery was estimated as high risk, and it was decided to perform transcatheter aortic valve implantation (TAVI). Patient was presented to TAVI Heart Team. Meanwhile, the patient underwent successful balloon aortic valvuloplasty (BAV), with a consequent drop in the max gradient between the left ventricle and the aorta from 91 to 52 mmHg, without significant aortic regurgitation. After BAV and intensive diuretic therapy, left ventricle volume unloading and functional recovery was accomplished. Six months later, the patient underwent successful transfemoral TAVI (CoreValve 26). Control echocardiography (Figure 2) revealed the recovery of left ventricular systolic function (LVEF 50-55%) with normal function of the CoreValve (max gradient 24 mmHg, mean 10 mmHg), moderate mitral and tricuspid regurgitation and some reduction of pressures in the pulmonary circulation (PAP 45 mmHg). The patient was discharged on the 7th post-interventional day, mobilized, in NYHA II functional status.

Balloon dilatation of the aortic valve may successfully bridge the period until the final decision on the definite severe aortic stenosis treatment option. Even in very old patients, symptom relief in terminal stage of heart failure after BAV is raising the quality of life. It also gives an opportunity for patients to undergo more technically demanding, and more durable procedures. Heart team has a central role in this decision-making process.¹

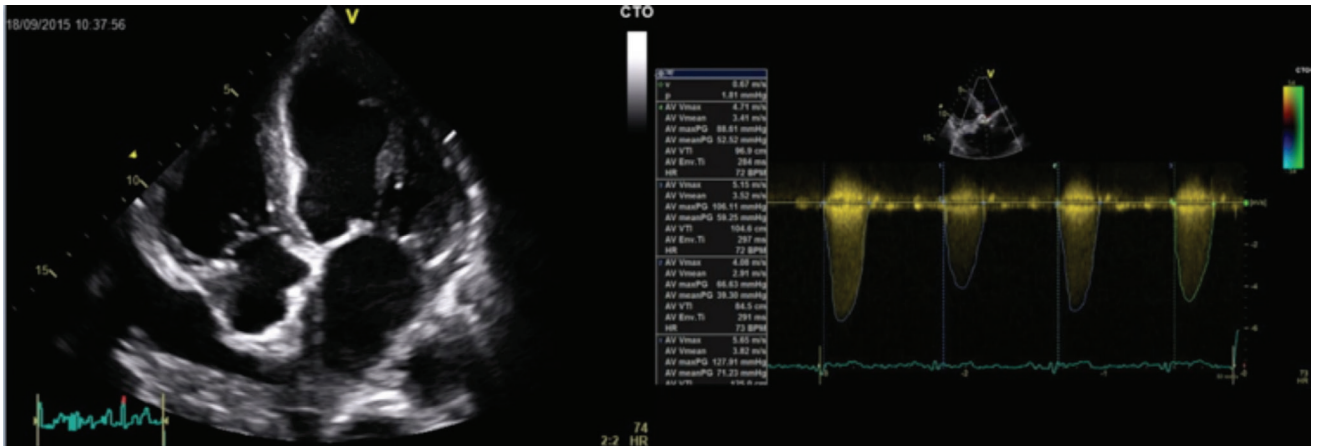


FIGURE 1. Apical 4-chamber view and continuous Doppler over aortic valve before interventions.

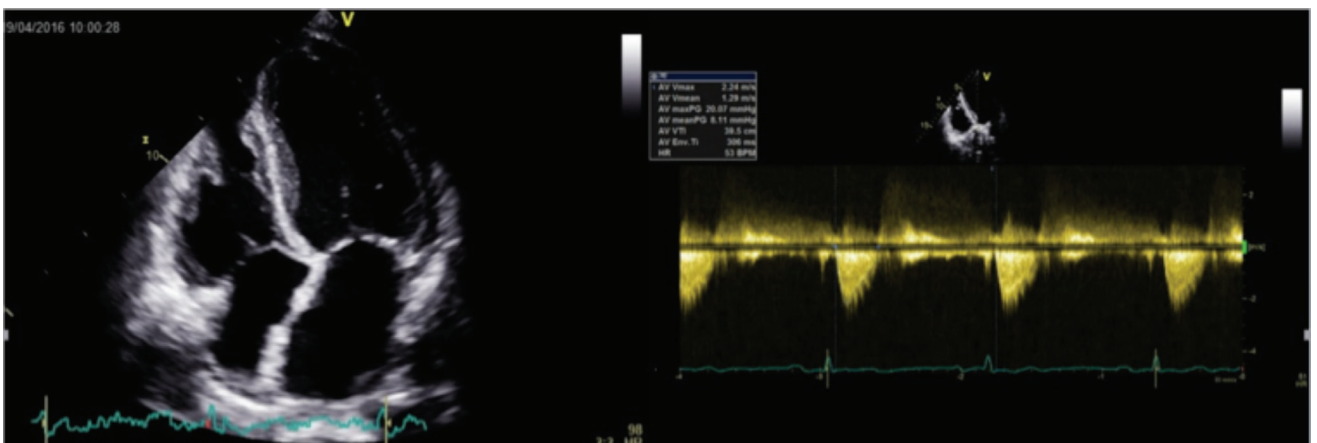


FIGURE 2. The apical four chamber view and Doppler aortic valve continuous wave after transcatheter aortic valve implantation.

LITERATURE

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