






Elektrostimulacija srca i transkateterska implantacija aortalnog zalistka

Electrostimulation of the heart and transcatheter aortic valve implantation

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Najčešća bolest zalistaka je aortna stenoza, njena se prevalencija sa sve većom starošću populacije povećava. Prevalencija u prosjeku iznosi od 2 do 4 % u osoba starijih od 65 godina.¹ Gotovo trećini bolesnika zbog visokog operativnog rizika i komorbiditeta nije kardiokirurški zbrinuta aortna stenoza, tj. nije operirana. Zbog toga je sve češća transkateterska implantacija aortalnog zalistka (TAVI). Tom se metodom na "kucajućem" srcu, uz pomoć katetera, postavlja umjetna biološka valvula na mjesto degeneriranog nativnog zalistka. Ukoliko bolesniku prethodno nije implantiran trajni elektrostimulator srca potrebno mu je postaviti privremeni elektrostimulator srca. Elektrostimulacija srca tijekom postavljanja aortalnog zalistka služi za kratkotrajno izazivanje ventrikulske tahikardije tijekom balonske dilatacije i otpuštanja valvule s katetera.

Zbog anatomske korelacije između strukture aortne valvule i provodnog sustava srca, jedna od najčešćih komplikacija nakon TAVI -a su poremećaji provodnog sustava koji uključuju blok snopova grana, totalni blok i potrebu za trajnom implantacijom srčanog stimulatora. Iako ti poremećaji obično nisu smrtonosni, mogu imati veliki utjecaj na stanje bolesnika i dugoročne posljedice. Postoji nekoliko čimbenika rizika za smetnje provođenja, uključujući životnu dob, anatomiju srca, periproceduralne čimbenike, vrstu implantirane valvule, već postojeće abnormalnosti i komorbiditete. Kako ova tehnika postaje sve dostupnija, bolesnike je potrebno detaljno pripremiti kako bi se razvoj poremećaja provodnog sustava srca nakon TAVI -ja sveo na minimum.

The most common valve disease is aortic stenosis, its prevalence increases with increasing age of the population. The prevalence averages 2 to 4% in patients over 65 years of age.¹ Almost a third of patients do not have cardiac surgery for aortic stenosis due to high operative risk and comorbidity. Therefore, transcatheter aortic valve implantation (TAVI) is being performed more and more often. With this method, an artificial biological valve is inserted into the place of the degenerated native valve on the "beating" heart, with the help of a catheter. If the patient has not previously been implanted with a permanent pacemaker, a temporary pacemaker should be installed. Electrostimulation of the heart during aortic valve placement serves to briefly induce ventricular tachycardia during balloon dilatation and release of the valve from the catheter.

Due to the anatomical correlation between the structure of the aortic valve and the conduction system of the heart, one of the most common complications after TAVI are disorders of the conduction system involving branch bundle block, complete heart block, and the need for permanent pacemaker implantation. Although these disorders are not usually fatal, they can have a major impact on patients' condition and long-term consequences. There are several risk factors for conduction disturbances, including age, heart anatomy, periprocedural factors, type of valve implanted, pre-existing abnormalities, and comorbidities. As this technique becomes increasingly familiar to physicians, patients need to be prepared in order to minimize the development of cardiac conduction disorders after TAVI.

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LITERATURE

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