Evolut R implantation in Perceval bioprosthesis with periprosthetic leakage

Implante de Evolut R en bioprótesis Perceval con insuficiencia periprotésica

Ramiro Trillo Nouche,* Fernando Gómez Peña, Diego López Otero, Xoan Carlos Sanmartín Peña, Ana Belén Cid Álvarez, and José Ramón González Juanatey

Unidad de Cardiología Intervencionista, Servicio de Cardiología, Complejo Hospitalario Universitario de Santiago de Compostela, Centro de Investigación Biomédica en Red de Enfermedades Cardiovasculares (CIVERTCV), Santiago de Compostela, A Coruña, Spain

PRESENTATION OF THE CASE

We hereby present the case of an 83 year old hypertensive, diabetic male patient with asymptomatic severe aortic stenosis, preserved ventricular function, mild mitral regurgitation and no coronary artery disease.

He had low-intermediate surgical risk (3.1% in the Society of Thoracic Surgeons scoring system) and, in medical-surgical session, it was decided to proceed with the surgical replacement of his aortic valve.

Perceval Sutureless Aortic Heart Valve, Sorin size L was implanted. The follow-up echocardiogram prior to hospital discharge showed an aortic transvalvular gradient of 22/11 mmHg and 2 periprosthetic regurgitation jets indicative of mild-to-moderate aortic failure with pulmonary artery systolic pressure of 40 mmHg.

Five months after valvular replacement, the patient was hospitalized due to acute heart failure with acute pulmonary edema. During the physical examination, the auscultation showed murmurs indicative of grade III/IV aortic regurgitation and bilateral pulmonary rales. The echocardiogram showed severe aortic failure due to the lack of stent coverage of the aortic bioprosthesis at the level of the aortic annulus and in the area corresponding to the non-coronary sinus and most of the right coronary sinus which conditioned 2 regurgitation jets towards the left ventricle that appeared slightly dilated. The left ventricular ejection fraction was somehow depressed. Both mitral regurgitation and pulmonary hypertension were categorized as severe being the pulmonary artery systolic pressure, 60 mmHg.

CONFLICTS OF INTEREST

R. Trillo Nouche is proctor for Medtronic.