

Documents

Glauber, M.^a, Kent, W.D.T.^b, Asimakopoulos, G.^c, Troise, G.^d, Padrò, J.M.^e, Royse, A.^f, Marnette, J.-M.^g, Noirhomme, P.^h, Baghai, M.ⁱ, Lewis, M.^j, Di Bacco, L.^a, Solinas, M.^k, Miceli, A.^a

Sutureless Valve in Repeated Aortic Valve Replacement: Results from an International Prospective Registry
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^a Istituto Clinico Sant'Ambrogio, Milano, Italy

^b Libin Cardiovascular Institute and University, Calgary, AB, Canada

^c Royal Brompton Hospital, London, United Kingdom

^d Fondazione Poliambulanza, Brescia, Italy

^e Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

^f Royal Melbourne Hospital, Melbourne, Australia

^g CHR de Namur, Namur, Belgium

^h Saint Luc University Clinic, Brussels, Belgium

ⁱ King's College Hospital, London, United Kingdom

^j Sussex University Hospitals, Sussex, United Kingdom

^k Pasquinucci Heart Hospital, Massa, Italy

Abstract

Objective: To report early and midterm results registry of patients undergoing repeated aortic valve replacement (RAVR) with sutureless prostheses from an international prospective registry (SURE-AVR). Methods: Between March 2011 and June 2019, 69 patients underwent RAVR with self-expandable sutureless aortic bioprostheses at 22 international cardiac centers. Results: Overall mortality was 2.9% with a predicted logistic EuroSCORE II of 10.7%. Indications for RAVR were structural valve dysfunction (84.1%) and infective prosthetic endocarditis (15.9%) and were performed in patients with previously implanted bioprostheses (79.7%), mechanical valves (15.9%), and transcatheter valves (4.3%). Minimally invasive approach was performed in 15.9% of patients. Rate of stroke was 1.4% and rate of early valve-related reintervention was 1.4%. Overall survival rate at 1 and 5 years was 97% and 91%, respectively. No major paravalvular leak occurred. Rate of pacemaker implantation was 5.8% and 0.9% per patient-year early and at follow-up, respectively. The mean transvalvular gradient at 1-year and 5-year follow-up was 10.5 mm Hg and 11.5 mm Hg with a median effective orifice area of 1.8 cm² and 1.8 cm², respectively. Conclusions: RAVR with sutureless valves is a safe and effective approach and provides excellent clinical and hemodynamic results up to 5 years. © The Author(s) 2021.

Author Keywords

AVR; redo surgery; sutureless

Index Keywords

aged, all cause mortality, aortic valve replacement, Article, cardiopulmonary bypass, coronary angiography, coronary artery bypass graft, endocarditis, EuroSCORE, extracorporeal oxygenation, feasibility study, female, heart left ventricle ejection fraction, heart ventricle function, hemodynamics, hospitalization, human, length of stay, major clinical study, male, mediastinitis, mitral valve surgery, overall survival, pacemaker implantation, paravalvular leak, prospective study, sternotomy, transesophageal echocardiography, vascular access, aortic valve, aortic valve stenosis, bioprosthesis, heart valve prosthesis, heart valve replacement, prosthesis design, register, treatment outcome; Aortic Valve, Aortic Valve Stenosis, Bioprosthesis, Heart Valve Prosthesis, Heart Valve Prosthesis Implantation, Humans, Prosthesis Design, Registries, Treatment Outcome

Correspondence Address

Miceli A.; Istituto Clinico Sant'AmbrogioItaly; email: antoniomiceli79@alice.it

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