respectively. Although the incidence of 30-day readmission remained stable (14.9% in 2014 vs 14.7% in 2018), there was a trend toward a temporal increase in both 90-day and 180-day readmissions (from 24.9% to 28.1% and from 33.8% to 37.0%, respectively) (Figure 1). The adjusted median length of stay decreased by 50% from 4.0 days in 2014 to 2.0 days in 2018 (−1.9 [IQR: −1.85 to −2.11]; $P < 0.001$). This trend was associated with a $2,100 reduction in risk and inflation-adjusted in-hospital cost (Figure 2).

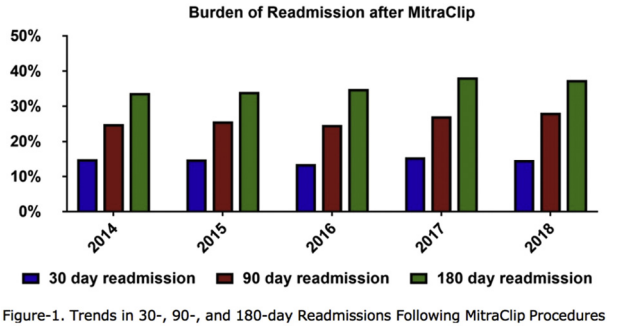

Figure-1. Trends in 30-, 90-, and 180-day Readmissions Following MitraClip Procedures

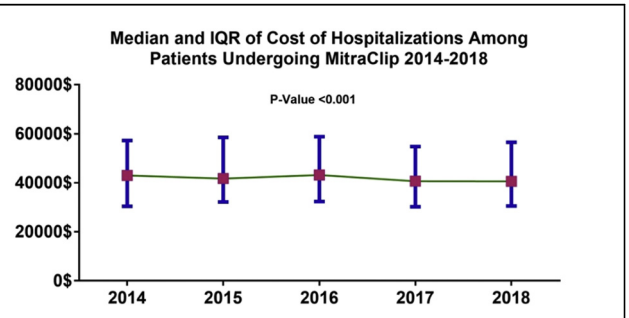

Figure-4. Trends in Risk and Inflation-Adjusted Median Cost of MitraClip Between 2014 and 2018. IQR; interquartile range

CONCLUSION The volume of TEER has grown substantially from 2014 to 2018 coupled with a temporal improvement in in-hospital outcomes and reduction in cost and length of stay. Rehospitalization rates after TEER remained steady at 30 days and trended toward worsening over time at 90 and 180 days.

CATEGORIES STRUCTURAL: Valvular Disease: Mitral

TCT-197

Independent Clinical and Echocardiographic Predictors of Restenosis After Percutaneous Mitral Balloon Commissurotomy Followed for 24 Years

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BACKGROUND Mitral valve stenosis is one of the most common structural heart diseases in developing countries and is primarily due to rheumatic disease. Percutaneous mitral balloon valvuloplasty (PMBV) has been, since its introduction in 1984, the preferred treatment. However, restenosis presents with an approximate incidence of 20%. Echocardiographic scoring of the mitral apparatus has been the main tool used to indicate and foresee the possible result of the procedure. The objective of this study was to examine risk factors of mitral valvular restenosis in a significant number of patients submitted to percutaneous mitral balloon commissurotomy (PMBC) for the treatment of mitral valve stenosis, particularly when secondary to rheumatic heart disease.

METHODS This study reports the vast experience of a single high-volume tertiary institution where 1,794 consecutive patients were treated with PMBC from 1987 to 2011. The primary end point was to determine the independent predictors of this untoward event, defined as loss of more than 50% of the original increase in maximum valve area (MVA) or MVA <1.5 cm^2.

RESULTS Mitral valve restenosis was observed in 26% of the cases (n = 483). Mean population age was 36 years, with most patients being female (87%). Mean follow-up duration was 4.8 years. At multivariate analysis, independent preprocedural predictors of restenosis were left atrial diameter (HR: 1.03; 95% CI: 1.01-1.04; $P < 0.01$), preprocedure maximum gradient (HR: 1.01; 95% CI: 1.00-1.03; $P = 0.02$), and higher Wilkins score (HR: 1.37; 95% CI: 1.13-1.66; $P < 0.01$).

CONCLUSION In the very-long-term follow-up, mitral valve restenosis was observed in one-fourth of the population undergoing PMBC. Preprocedure echocardiographic findings for left atrial diameter, maximum valve gradient, and high Wilkins score were found to be the only independent predictors of this deleterious event.

CATEGORIES STRUCTURAL: Valvular Disease: Mitral

TCT-198

Clinical Results of Drug-Coated Balloon Treatment in a Large-Scale Multicenter Korean Registry Study

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BACKGROUND The aim of this study was to demonstrate the efficacy and safety of treatment with drug-coated balloon (DCB) in a large real-world population and compare outcomes between patients with in-stent restenosis (ISR) and those with de novo coronary arterial lesions.

METHODS Patients treated with DCBs were included in a retrospective multicenter observational registry that enrolled patients from 18 hospitals in Korea from January 2009 to December 2017. The primary outcome was target lesion failure (TLF) defined as a composite of cardiovascular death, target vessel myocardial infarction, and clinically indicated target lesion revascularization at 1 year.

RESULTS The study included 2,368 patients with 2,368 DCB-treated coronary artery lesions: 1,385 (58%) with ISR lesions versus 983 (42%) with de novo lesions. The mean age was 65.7 ± 11.4 years; 69.8% of the patients were men. At 12 months, the primary outcome, TLF, occurred in 127 (5.4%), 92 (6.6%), and 35 (3.6%) patients among the total, ISR, and de novo lesion populations, respectively. Patients with ISR lesions had significantly higher cumulative incidence of TLF than patients with de novo lesions. However, after propensity score matching and inverse probability of treatment weighting adjustment, the primary and secondary outcomes were similar between the ISR and de novo groups.

				Unadjusted		Adjusted		Propensity score–matched		IPTW-adjusted	
	Overall	De novo	ISR	HR (95% CI)	p	HR (95% CI)	p	HR (95% CI)	p	HR (95% CI)	p
Cardiac death (%)	39 (1.6)	10 (1.0)	29 (2.1)	0.48 (0.24,0.99)	0.047	0.66 (0.21,2.14)	0.492	0.62 (0.2,1.91)	0.408	0.9 (0.36,2.23)	0.817
TV MI (%)	31 (1.3)	8 (0.8)	23 (1.7)	0.48 (0.22,1.08)	0.078	2.03 (0.6,6.82)	0.251	1.4 (0.44,4.39)	0.568	1.96 (0.8,4.82)	0.143
TLR (%)	90 (3.8)	24 (2.4)	66 (4.8)	0.5 (0.31,0.8)	0.004	1.13 (0.57,2.25)	0.731	0.9 (0.45,1.79)	0.753	1.17 (0.65,2.12)	0.6
TLF (%)	127 (5.4)	35 (3.6)	92 (6.6)	0.53 (0.36,0.78)	0.001	1.11 (0.62,1.99)	0.72	0.92 (0.51,1.67)	0.791	1.15 (0.7,1.89)	0.577

CONCLUSION This large multicenter DCB registry study revealed the favorable clinical outcome of DCB treatment in real-world practice. Although the incidence of TLF was higher in the ISR lesion group than in the de novo lesion group, the clinical outcome was similar after adjusting for the difference in baseline characteristics (Table 1).

CATEGORIES CORONARY: Drug-Eluting Balloons and Local Drug Delivery