Mitral valve repair for endocarditis

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Abstract

Many authors have reported their results of mitral valve (MV) repair1,2 in acute and healed endocarditis. However, the results published from different authors highlight the fact that the reparability rate for this indication remains low. Over the last 3 decades our group has adopted an early and repair-oriented approach to the infective endocarditis with the objective to improve the repair rate and the long-term results. In this paper we describe our institutional experience on mitral valve repair for infective endocarditis. Data for this paper were extracted from our institutional database on heart valve disease. From 1991 to 2015, 160 consecutive patients in our institution underwent MV surgery for active IE on native MV. The median follow-up was 122 months. This study was approved by the institutional ethics review board, and written informed consent was waived for this study given its retrospective design. Hospital mortality was 11.6 % (n = 18). Early MV reoperation before hospital discharge was required in 5 (3.1%) patients. At 5, 10 and 15 years, overall survival in the MVr for endocarditis in group was $79 \pm 4\%$, 65 + 5%, 57 + 6%, respectively. Freedom from reoperation at 5, 10 and 15 years was 95 + 2%, 88 + 4% and 81 + 6%, respectively. Mitral infective endocarditis is an insidious pathology and his surgical approach can be challenging. An early and repair-oriented surgical approach can allow to improve reparability rates with good long-term durability and a low recurrence rate of endocarditis.

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NOTABLESMitral valve repair for endocarditis-Journal of Cardiac Surgery.pdf available at https://authorea.com/users/350394/articles/475250-mitral-valve-repair-for-endocarditis

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	MVRepair (n=155)		
Echo findings			
Vegetation(s) >1 cm	87	55.4%	
Abscess	44	28.0%	
MR 2-3/4	87	55.4%	
Embolic complications	76	34.4%	
Antimicrobial drugs resistance	31	19.7%	
Heart failure	35	22.3%	

No patch techniques		MVRepair n=155	
		41.9%	
Triangular or quadrangular resection	65	41.9%	
Quadrangular resection + sliding plasty	18	11.6%	
Artificial neochordae (Goretex ®CV5)	23	14.8%	
Native chordae transfert	13	8.4%%	
Commisurotomy	3	1.9%%	
Papillary muscles shortening	1	0.6%	
Patch techniques	n=90	58.1%	
Pericardial patch (bovine et autologous)*	72	46.5%	
Tricuspid autograft patch	9	5.8%	
Flip-over technique (transfert from the posterior to the anterior leaflet)		4.5%	
Part of a mitral valve homograft	11	7.1%	
Annuloplasty techniques	79	51%	
Prosthetic ring	63	40.6%	
Pericardial Band	16	10.3%	
Prosthesis			
Biological prosthesis	-	-	
Mechanical prosthesis	-	-	
ECC mean time (min)**	128±51.2		
Aortic cross clamp mean time (min)	90±31.3		