



AORTIC REGURGITATION IN PATIENTS UNDERGOING AORTIC BALLOON VALVULOPLASTY

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

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Session Title: Valvular Disease- TAVI in the 21st Century- Understanding the Process

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Authors: *Manuel A. Gonzalez, Itsik Ben-Dor, Gabriel Maluenda, Michael Mahmoudi, Michael A. Gaglia, Jr., Kohei Wakabashi, Gabriel Sardi, Rafael Romaguera, Ana Laynez-Carnicero, Rebecca Torguson, William O. Suddath, Augusto D. Pichard, Lowell F. Satler, Ron Waksman, MedStar Research Institute - Washington Hospital Center, Washington, DC*

Background: Severe aortic regurgitation (AR) is a contraindication for aortic balloon valvuloplasty (ABV). However, the effects of ABV in the presence of mild and moderate AR are unknown.

Methods: The study included 263 consecutive patients with symptomatic severe aortic stenosis who were subjected to ABV. Patients were stratified into groups according to pre-procedure degree of AR assessed by echocardiogram available before the procedure. Patients received post-ABV echocardiography and were followed for clinical events at 1 year.

Results: The study groups included pre-ABV with no AR = 76 (29.9%), mild AR = 180 (68.3%), and moderate AR = 7 (2.7%). There were no differences in the baseline characteristics with a mean age of 81.9±9.4 and STS = 12.9±9. At 1 year, the rate of death was 41.1% in patients with no AR, 46.9% in patients with mild AR, and 63.6% in patients with moderate AR respectively, p = 0.31. The number of patients post-ABV with no AR decreased to 43 (16.3%), and increased in the mild AR to 206 (78.3%) and moderate AR to 14 (5.4%), p = 0.0009. The proportion of patients with no AR pre-ABV who developed mild AR post-ABV was 48.7%, and the proportion with mild AR pre-ABV who developed moderate AR post-ABV was 4.5%, all p <0.001, table. Two patients developed severe AR post-ABV.

Conclusion: It is safe to perform ABV in patients with mild and moderate AR. Half the patients with no AR may develop mild AR and a small percentage with mild AR will develop moderate AR post-ABV. This result needs to be confirmed in other studies.

Pre-ABV	Post-ABV (%)	
No (n=76)	No	39 (51.3)
	Mild	37 (48.7)
	Moderate	0 (0)
Mild (n=180)	No	4 (2.2)
	Mild	168 (93.3)
	Moderate	8 (4.5)
Moderate (n=7)	No	0 (0)
	Mild	1 (14.3)
	Moderate	4 (57.1)
	Severe	2 (28.6)
Total (n=263)		
ABV = Aortic balloon valvuloplasty		