Response to Repeat Percutaneous Balloon Mitral Valvotomy vs. Mitral Valve Replacement in Patients with Restenosis after Previous Balloon Mitral Valvotomy and Unfavorable Valve Characteristics

Aslanabadi N et al. *Clin Cardiol.* 2011;34:401–406.

To the Editor:

We read with great interest the report by Aslanabadi et al published in the Clinical Investigations section of this journal.¹ We have some comments to make.

The two groups were not randomized. Clearly, patients in the mitral valve replacement (MVR) group were sicker. They were older, with a higher New York Heart Association-Functional Class mitral valve area, mitral regurgitation grade, and pulmonary artery systolic pressure, as well as a higher prevalence of atrial fibrillation and lower left ventricular function, although left atrial sizes and pressures, echo scores, and transvalvular gradients were similar between the groups. In addition, criteria for choosing MVR or repeating percutaneous balloon mitral valvotomy (re-PBMV) in these patients were “at the discretion of the attending physician and patient preference.” As such, it is not surprising that the 10-year survival was significantly higher in re-PBMV vs MVR (96% vs 72.7%, respectively, ($P < 0.05$) in this study. Having said this, in today's day and age it would be difficult to randomize patients to these 2 treatment modalities.

Although we have shown in a previous study² that in univariate analysis the major predictor of successful balloon mitral valvotomy for mitral restenosis was Wilkins score, we agree with the authors that the Wilkins score itself may not always be a very robust predictor of events after mitral valve procedures. In fact, we feel that practically, bicommissural calcium and the presence of severe mitral regurgitation are the only real contraindications for balloon mitral valvotomy. In a previous study, long-term outcome of patients with unilateral commissural calcification receiving balloon mitral commissurotomy showed no significant difference as compared to those with an absence of commissural calcification.³ We are curious to know what percentage of patients in either group had unicommissural or bicommissural calcium in this study.

In addition, we believe that mitral restenosis is itself a heterogeneous condition, and the treatment response depends on whether the restenosis followed prior balloon mitral valvotomy or prior closed mitral valvotomy. In a recent paper,² we had shown that following balloon mitral valvotomy for mitral restenosis, patients with prior balloon mitral valvotomy were found to have lesser event rates on follow-up compared to patients with prior closed mitral valvotomy, although procedural success rates are similar.

We invite the authors' response to these comments.

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