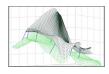
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## TIME TO REST ON OUR LAURELS OR ESCAPE OUR BED OF THORNS?



## To the Editor:

Tomsic and colleagues<sup>1</sup> have presented data on 2 groups of patients who underwent repair of posterior leaflet prolapse: a resect group of 82 patients and a respect group of 43 patients. In the resect group, a variety of resections were performed but notably 41 (50%) patients also underwent chordal replacement in keeping with the title of the article: "respect and resect." In the respect group, polytetrafluoroethylene neochordae were used as described by Perier.<sup>2</sup> He advocated replacement of posterior leaflet resection with the use of neochordae implanted and adjusted to immobilize the posterior leaflet in a way that produced changes in leaflet motion similar to quadrantic resection. He reported that "most of the time echocardiographic results after valve repair shows a posterior leaflet with little or no mobility hanging vertically from the annulus and forming, as shown experimentally, a buttress against which the anterior leaflet comes in apposition."<sup>2</sup> Both groups received the same semirigid annuloplasty rings. Thus, it is consistent with the known similarities of the effects of these techniques at the leaflet and annular level, that the authors found that left ventricle performance was similar in both groups. The absence of a normal control group is a limitation of the study.

Alternatively, neochordae can be used to restore normal leaflet motion, not create immobility.<sup>3</sup> Normal leaflet motion requires intact unresected leaflets and normal annular motion, preserved by the use of fully flexible rings.<sup>4</sup> Techniques based on these principles are applicable to all leaflet segments, not just the posterior leaflet. Our own comparison of restorative use of neochordae and flexible rings

compared with leaflet resection showed better preserved annular function, superior leaflet motion, larger annuloplasty ring sizes, and lower transmitral gradients using these techniques.<sup>5</sup> These studies suggest that the full benefits of chordal replacement will not be recognized unless combined with restoration of normal mitral annular and left ventricular outflow tract function. Thus, descriptions of the use of neochordae should specify in what context they are being used, as was done by Tomsic and colleagues.<sup>1</sup>

This study has provided reassuring data regarding postoperative left ventricle function measured by global longitudinal strain in patients undergoing treatment of localized posterior leaflet prolapse. However, I believe it is premature to suggest that this study proves equivalence and interchangeability between leaflet resection and neochordal replacement in general. The extent to which complete reparability can be achieved and left ventricular outflow tract performance preserved, including the incidence of systolic anterior movement, were not addressed in this study. The authors are to be commended for their efforts to advance our knowledge toward the goal of successful mitral repair for all eligible patients.

Gerald M. Lawrie, MD
Department of Cardiovascular Surgery
Houston Methodist DeBakey Heart & Vascular Center
Houston, Tex

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