equivalent even though different. Do what works best in your hands.

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Commentary: Left ventricular function after mitral valve repair

Tirone E. David, MD

This retrospective study by van Wijngaarden and colleagues¹ from Leiden University on postoperative left ventricular function following mitral valve repair for posterior leaflet prolapse treated either by resection or chordal replacement shows that the technique used to correct the leaflet prolapse had no effect on postoperative left ventricular function. The study is retrospective and has several other limitations, as noted by the authors. However, even if they had randomized their patients and stratified by variables known to affect postoperative ventricular function, the results would have been the same.

I have performed mitral valve repair in more than 3000 patients, and my research assistants have followed them postoperatively with periodical echocardiography to assess both valve and ventricular function. Postoperative ventricular dysfunction after the correction of chronic mitral regurgitation is a complex, frustrating, and incompletely defined

Tirone E. David, MD

CENTRAL MESSAGE

The surgical technique used for correction of chronic mitral regurgitation due to leaflet prolapse has no effect on postoperative left ventricular function.

problem. Patients with apparently normal systolic function before surgery sometimes develop severe ventricular dysfunction that impairs their functional capacity and late survival.² As long as the heart is well protected during surgery and the circumflex artery is not kinked or ligated, what we do mechanically to correct the regurgitant lesion has no known effect on ventricular function. The type of annuloplasty ring also has no effect on ventricular function²; ditto for the type of correction of leaflet prolapse.

I do not believe that chordal replacement is superior to resection in treating posterior leaflet prolapse and have used both techniques depending on the size, height, and

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thickness of the prolapsing posterior leaflet.³ I believe that prolapse of the posterior leaflet in patients with fibroelastic deficiency is best treated by creating new chords with expanded polytetrafluoroethylene sutures, because the leaflets are often small, and every segment should be preserved. Prolapse of the posterior leaflet in patients with advanced myxomatous degeneration is probably best treated by some type of resection. Large, thick, and voluminous posterior leaflets are probably best managed by resection, which is best performed by detaching the leaflet from the annulus, severing the secondary chordae tendineae attached to its ventricular surface, and shortening the height by trimming its base and reattaching it to the annulus. The false commissures may have to be partially closed after this type of resection, and new chords are still necessary to correct the prolapse.

The most common types of posterior leaflet prolapse are in between these extremes, however, and both resection and chordal replacement work equally well. For these cases, I now prefer chordal replacement over resection, because it has been our experience that if the repair fails in the future, re-repair is more likely to be feasible if the posterior leaflet was left intact at the initial operation.

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Commentary: More insights into the resect versus respect debate: Will we ever have a winner?

Martin Misfeld, MD, PhD,^{a,b,c,d,e} and
Michael A. Borger, MD, PhD^a

Surgery for mitral valve regurgitation is the only treatment that improves clinical symptoms, prevents heart failure, and has a beneficial effect on survival.¹ In degenerative mitral valve disease, various techniques can be applied to restore valve competence, with nearly all involving stabilization of the annulus.² Prolapsing leaflets are mainly corrected by different resection techniques with or without

Martin Misfeld, MD, PhD, and Michael A. Borger, MD, PhD

CENTRAL MESSAGE

In the absence of randomized evidence, more data are needed to declare a winner of the “resect versus respect” debate.

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implantation of neochords (“resect”) or by the use of neochords alone (“respect”). It remains speculative whether one or the other technique is superior with regard to durability and preserving mitral-ventricular continuity. In the absence of randomized trials, large retrospective series represent the best available evidence.

Van Wijngaarden and colleagues³ compared “resect” and “respect” techniques with regard to the echocardiographic parameter of left ventricular global longitudinal strain (LV-GLS) for assessment of LV function. Both