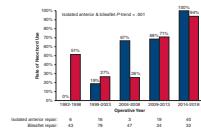


Dr Gillinov reported consultant to Edwards Lifesciences, Medtronic, CryoLife, Abbott, Johnson & Johnson, and ClearFlow. Dr Wierup reported consultant to Edwards Lifesciences, Medtronic, and CryoLife. Dr Burns reported consultant to Medtronic.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

4. Lawrie GM, Earle EA, Earle NR. Feasibility and intermediate term outcome of repair of prolapsing anterior mitral leaflets with artificial chordal replacement in 152 patients. *Ann Thorac Surg*. 2006;81:84.

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REPLY: EXCELLENT AND EQUAL OUTCOMES FOR ANTERIOR AND POSTERIOR LEAFLET MITRAL REPAIRS ARE EQUALLY ACHIEVABLE... IF YOU EQUALLY ELIMINATE MR

Reply to the Editor:

We appreciate the comments¹ by Dr Lawrie regarding his experience with anterior leaflet mitral valve repair,

in response to our series comparing outcomes between propensity-matched patients undergoing degenerative anterior and posterior mitral repair over a 27-year period.²

We congratulate Dr Lawrie for his practice's impressive series using neochordal techniques for 301 anterior and 451 posterior leaflet repairs, with no differences in recurrent mitral regurgitation, reoperation, or survival.³ Our current approach to anterior leaflet repairs is similar in using at least 2 polytetrafluoroethylene neochords with a semi-rigid partial ring annuloplasty, whereas we typically approach posterior leaflet disease with neochords and/or resection in conjunction with annuloplasty. Also mirroring Dr Lawrie and his colleagues, our use of neochords for anterior repair increased significantly over the study period (*P* trend <.001; Figure 1). Over the past decade, we have used neochords for every isolated anterior repair except one in 2013 (52/53, 98%), in which annular reefing and anterior leaflet debridement was performed.

We first used neochords in 1994 and have continued to use them in addition to Carpentier techniques, depending on valvular anatomy and pathology. Most importantly, success in all types of mitral valve repair (isolated anterior, bileaflet, and isolated posterior) is driven by the avoidance of residual and recurrent mitral regurgitation. These favorable outcomes by Dr Lawrie³ and others^{4,5} further reinforce our data that isolated anterior, bileaflet, and isolated posterior repair should be aggressively pursued over replacement for degenerative mitral disease.

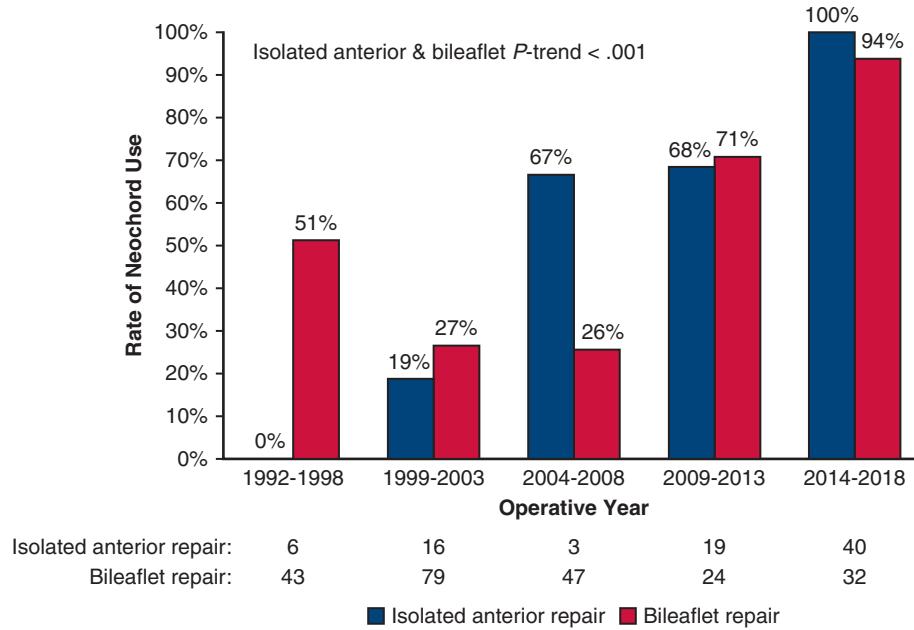


FIGURE 1. Trends in neochord use for isolated anterior (blue) and bileaflet (red) mitral repair over time. Number of each repair type is shown below the column graph. The Cochran-Armitage test of trend was used to separately evaluate isolated anterior and bileaflet repair.

Adult: Mitral Valve: Letters to the Editor

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*University of Michigan
Ann Arbor, Mich*

References

1. Lawrie GM. Is the fate of the anterior leaflet determined by original sin or by the weakness of man? *J Thorac Cardiovasc Surg.* 2021;161:e27.
2. Brescia AA, Watt TMF, Rosenbloom LM, Murray SL, Wu X, Romano MA, et al. Anterior versus posterior leaflet mitral valve repair: a propensity-matched analysis. *J Thorac Cardiovasc Surg.* March 5, 2020 [Epub ahead of print].
3. Lawrie GM, Zoghbi W, Little S, Shah D, Ben-Zekry Z, Earle N, et al. One hundred percent reparability of degenerative mitral regurgitation: intermediate-term results of a dynamic engineered approach. *Ann Thorac Surg.* 2016;101:576-83; discussion 583-4.
4. Castillo JG, Anyanwu AC, El-Eshmawi A, Adams DH. All anterior and bileaflet mitral valve prolapses are repairable in the modern era of reconstructive surgery. *Eur J Cardiothorac Surg.* 2014;45:139-45; discussion 145.
5. Goldstone AB, Cohen JE, Howard JL, Edwards BB, Acker AL, Hiesinger W, et al. A "Repair-all" strategy for degenerative mitral valve disease safely minimizes unnecessary replacement. *Ann Thorac Surg.* 2015;99:1983-90; discussion 1990-1.

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*Alexander A. Brescia, MD, MSc
Steven F. Bolling, MD
on behalf of the Michigan Mitral Research Group (MMRG)
Department of Cardiac Surgery*