The author reported no conflicts of interest.

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.

THE ANNULOPLASTY RING IN MITRAL VALVE REPAIR

To the Editor:

I have carefully read the article by D'Onofrio and colleagues, in which they analyzed the long-term results at 5 years after using transapical neochordae implantation in patients having degenerative mitral valve (MV) disease. The most remarkable finding was the cumulative incidence of recurrent severe mitral regurgitation at 5-year follow-up of 14% in patients with favorable anatomy versus 63% in patients with unfavorable anatomy, respectively ($P < .001$).[1] The authors should be congratulated. However, the situation requires closer scrutiny.

Median European System for Cardiac Operative Risk Evaluation (EuroSCORE) II was 1.4%, indicating that the population could have been treated by classic surgical procedures, given the fact that they were not at high risk for operative mortality. This fact is especially important because the technique used for this procedure lacks the pivotal component for any MV repair, the prosthetic annuloplasty ring. Since the seminal paper by Carpentier and colleagues[2] in 1971, the annuloplasty ring has been identified as the most important step for the achievement of the best long-term outcome after MV repair. Several authors have previously published the importance of using the annuloplasty ring as a crucial part of the surgical MV repair. In fact, the lack of an annuloplasty ring is one of the most powerful predictors for failure after operation.[3-5] Unfortunately, many of the prevailing management techniques (transcatheter, or those other than the classic surgical approach) are based on the notion of a ringless therapy, which is inappropriate by scientific principles. It seems highly doubtful that this concept will succeed, as other ringless MV therapies have previously failed to meet the long-term success of an annuloplasty ring–based surgical procedure. In the face of these challenges, mutual cooperation between specialties is a necessity to avoid duplication of efforts resulting in any possible frustration of fundamental goals. Hence, solutions in one area can be applied to another. In recent times, much discussion has centered on the use of off-pump procedures. Such models have been shown to be quite useful in treating the heart valve disease. However, due to a lack of basic information, the predictive capabilities are often erroneous. Consequently, one should approach the results with some skepticism until underlying assumptions are well-understood. Rules for MV repair do not change just by shifting the approach. In these terms, the authors should explain in greater detail the rationale behind the results being most unexpected, according to established MV repair rules.

Ovidio A. García-Villarreal, MD
Mexican College of Cardiovascular and Thoracic Surgery
México City, México

References

1. D'Onofrio A, Fiocco A, Nadali M, Mastro F, Aruta P, Lorenzoni G, et al. Outcomes of transapical mitral valve repair with neochordae implantation. *J Thorac Cardiovasc Surg*. April 9, 2022 [Epub ahead of print]. https://doi.org/10.1016/j.jtcvs.2022.02.059
2. Carpentier A, Deloche A, Dauptain J, Soyer R, Blondeau P, Piwnica A, et al. A new reconstructive operation for correction of mitral and tricuspid insufficiency. *J Thorac Cardiovasc Surg*. 1971;61:1-13.
3. De Bonis M, Lapenna E, Pozzoli A, Giacomini A, Alfieri O. Edge-to-edge surgical mitral valve repair in the era of MitraClip: what if the annuloplasty ring is missed? *Curr Opin Cardiol*. 2015;30:155-60.
4. David TE, David CM, Tsang W, Lafreniere-Roula M, Manlhiot C. Long-term results of mitral valve repair for regurgitation due to leaflet prolapse. *J Am Coll Cardiol*. 2019;74:1044-53.
5. Gillinov M, Burns DJP, Wierup P. The 10 commandments for mitral valve repair. *Innovations (Phila)*. 2020;15:4-10.

https://doi.org/10.1016/j.xjon.2022.04.032