Commentary: A tailored approach

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The conundrum of how best to treat secondary mitral regurgitation has existed for many years. As has been repeatedly shown, the value of repair over replacement in mitral valve disease, if done with a durable result, is well recognized. The emphasis here is on durability. The performance of a reduction annuloplasty on regurgitant mitral valves in which the etiology of regurgitation was not believed to be valve related, was a simple and relatively straightforward approach to these valves. However, subsequent study has shown that recurrence rates were high.1 Yet recurrence did not happen in all cases. This begs the question: Are there differences in valve morphology that might portend better outcomes?

Drake and colleagues2 attempt to answer this question. They performed an extensive meta-analysis of series in which specific echocardiographic measurements were made. They found that certain measurements were associated with relative success when employing mitral valve repair techniques that ranged from annuloplasty alone to more extensive repair techniques. Perhaps most importantly, they identified conditions in which repair had a high probability of failure.

Their results were incorporated into a staging scheme that, in addition to identifying conditions in which repair was feasible, led to indications for which techniques might be applied with success. Included in the analysis was the potential for catheter-based edge-to-edge repair. Furthermore, the illustrations add greatly to the concepts outlined in the article.

This is extremely important information to have. It allows the ability to continue to offer a procedure that is inherently superior (mitral repair vs replacement) to select individuals. Building on prior studies, it is an excellent new starting point for a tailored approach to these patients. As the authors point out, key to this approach is “the need to adopt standardized imaging for anatomic quantification of mitral disease.” Suggestions are given at a national or society level. However, a more grassroots effort could also be done. Sharing this work with our cardiac imaging and structural colleagues and applying these principles would be a good first step in improving outcomes for this difficult problem.

References