Benchmark reoperative mitral surgery: There is room for improvement

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“Never measure the height of a mountain until you have reached the top. Then you will see how low it was.”

— Dag Hammarskjöld

In this issue of the *Journal*, Kaneko and colleagues¹ review a 24-year experience at Brigham and Women’s Hospital of more than 500 redo mitral operations and, from within, select a benchmark cohort based on compatibility with current transcatheter mitral valve-in-valve/ring (TMVIV/R) replacement therapies. Although overall operative mortality was 7.1% overall, in the Benchmark cohort the Society of Thoracic Surgeons Predicted Risk of Mortality was 6% and observed mortality was 4%. Major morbidities included permanent stroke at 4.1%, reoperation for bleeding at 2%, and re-redo valve at 1.4%. Long-term survival in the overall experience was 75% survival at 5 years with the usual villains of increased age, renal impairment, endocarditis, and previous mitral valve replacement being predictors of poor long-term survival. The authors discuss that “despite the encouraging results of TMVIV/R, an in-depth assessment of this technology is extremely crucial, especially in the context of limited long-term data.”

We agree with the authors that redo mitral valve replacement can be performed safely in these patients qualifying for the benchmark cohort; this does give us insight as to a “gold standard” approach for the current era. The authors correctly discuss the report by Yoon and colleagues² of TMVIV/R in 248 patients (Society of Thoracic Surgeons

Central Message

Reoperative mitral valve surgery has 75% 5-year survival in this benchmark analysis. Can transcatheter techniques for valve-in-valve or valve-in-ring offer fewer complications and better long-term outcomes?

See Article page 619.

Predicted Risk of Mortality 8.9%) with 1-year all-cause mortality rates of 28.7% in the valve-in-ring group compared with 12.6%; with the valve-in-valve group.

The take-home message is that postprocedural survival may be the ultimate reason for selecting one approach over another. With approximately 25% of mitral reoperations being performed for endocarditis, there will still unfortunately be extensive surgical work for this complex procedure.

Reference

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