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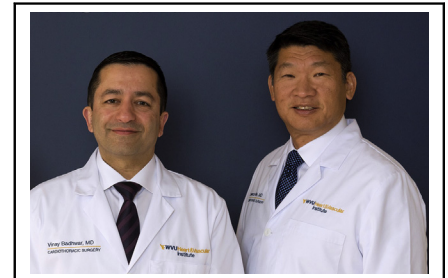


Commentary: A rose by any other name

Lawrence M. Wei, MD, and Vinay Badhwar, MD

Almeida and colleagues¹ summarize the challenges, opportunities, and evidence supportive of the relative superiority of a robotic approach over sternotomy for mitral valve repair when performed by centers and surgeons with experience. Their article accurately accounts for some single-center robotic mitral experiences outlining negligible mortality and morbidity, including the authors' own multiyear proficiency.¹ Nevertheless, wider extrapolation and applicability of robotic technology requires training at both the surgeon and institutional level, and a baseline volume of mitral surgery sufficient to maintain team proficiency and quality.

Robotic optics and visualization of the mitral pathoanatomy are truly excellent. The clarity of subvalvular chordal visualization helps experienced mitral valve surgeons evaluate nuances of mechanism perhaps not fully accessible by sternotomy or even video-assisted thoracotomy approaches. However, the commonly perpetuated adage that the robot makes one a better mitral repair surgeon is incorrect. For surgeons highly experienced in mitral valve repair, with a command of the pathoanatomic approach to reconstruction, as well as an existing familiarity of minimally invasive thoracotomy mitral repair, the added optics availed by dynamic robotic visualization and telemanipulation may indeed enhance performance and outcomes.^{2,3} Yet, better optics alone do not a better surgeon make. For those without this important foundational experience, robotic visualization



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CENTRAL MESSAGE

Robotic approach to mitral valve repair is a growing standard in many experienced institutions. Patients seek the least invasive techniques. Our mandate is to maintain quality with increased adoption.

will most definitely not improve or enhance one's ability to perform repair.

In the United States, upward of 14% of mitral valve repairs are performed robotically.⁴ The transition from sternotomy to robotics can be done without increasing net 90-day costs, including the amortized price of the robot and its disposable instruments, when it is performed by experienced mitral surgeons.² But this does not necessarily have to be limited to a mere handful of surgeons and programs. In recent years, many surgeons have developed a proficiency in mitral repair. The volume–outcome association threshold for mitral surgery has been estimated at 35 cases per surgeon and 75 per institution annually, yet access to programs capable of these volumes is available within a hospital referral region of more than 80% of the population in the United States.⁵ This noted, referral practice often mirrors expertise to repair complex degenerative mitral pathology in regional centers of excellence.^{2,4,6} It is often that these programs have the volume, experience, and institutional resources to support the commencement and sustainability of a successful robotic mitral valve program.

As advocates for robotic education and dissemination, we completely agree with the authors'¹ sentiment regarding the potential value of the robotic approach to mitral valve repair. However, as Shakespeare implied by the statement “a rose by any other name would smell as sweet,”⁷ it does

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not matter the approach or the name you give something, it is quality that is most important. As we embrace the expansion of robotic cardiac surgery, it is incumbent upon us to always focus on maintaining quality and outcomes when it comes to mitral valve repair.

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