(CorMatrix Cardiovascular, Roswell, Ga) was not durable, and abandoned its use.

This series highlights the art of surgery in the hands of a master surgeon. Understanding the geometric relationships of intracardiac structures, having the willingness to learn from experience and adapt technique, and having tenacity in the face of technical challenges are absolute standout features. In an earlier report on the series, David and colleagues² described a case requiring reconstruction of the entire mitral annulus due to calcification; the patient had 4 prior mitral valve replacements by other surgeons and developed early prosthetic valve endocarditis after the fifth (Dr David's) operation. The patient was offered a sixth operation, from which he eventually recovered. In the present series, 7.7% of patients underwent reoperation, which generally required taking down and reconstructing the patches and well as valve replacement. For those who are early in their career, this series offers a glimpse into the

iterative process that Dr David has taken to become a surgical expert.

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Commentary: U can't touch this

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Many times in his 1990 hit of the same name, MC Hammer intoned: "U can't touch this!"¹ Readers might agree while reviewing Tirone David's 35-year experience with aortic-mitral valve replacement and reconstruction of the intravalvular fibrous body.² David and colleagues,³ who first described the procedure in 1997, detail the various iterations of the procedure, provide illustrations, and report 1-, 10-, and 20-year survival of 81.8%, 51.1%, and 23.7%, respectively.

The 13.2% 30-day or in-hospital mortality is remarkable especially given that 69% of the operations were redo operations, with 16% being a third operation and 7%

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CENTRAL MESSAGE

The pioneer of aortic/mitral replacement and reconstruction of the intravalvular fibrous body presents his 35-year experience with outstanding 30-day and long-term outcomes.

being a fourth operation. I assume the later in the re-do sequence, the greater the risk. In addition, 39% had previous aortic root/valve and mitral valve replacement, although previous aortic root replacement did not increase 30-day mortality.

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The technique of reconstruction employing a valve within polyethylene terephthalate (Dacron) conduits for a severely damaged intravalvular fibrous skeleton is an option not commonly used. Having been victimized by perivalvular aortic valve and mitral valve leaks after reconstruction, the commentary about meticulously tightening each suture loop individually and utilizing individual sutures in the trigone areas is sage advice. I agree that having well-seated, pliable, nonstretched patches with well-secured sutures will avoid paravalvular leaks that can only be corrected with takedown of the repair. The 2 operative deaths—1 due to a dehiscence patch and 1 due to a dehiscence valve—and 16 long-term mortalities related to a dehiscence patch or valve point to the critical importance of every suture bite placed in the patch, conduit, and valves.

How many patients were evaluated to reach the 182 total patients? Also, were there any features on preoperative computerized tomography scan, echocardiography, or some other clinical factors that absolutely ruled out an operative approach?

My experience with patients with native valve endocarditis is that occasionally the intraoperative findings are far more destructive than expected from the preoperative evaluation, and surgeons are required to perform radical

debridement and the described procedure. What percentage of the patients undergoing aortic/mitral replacement and reconstruction of the intervalvular fibrosa were unexpected procedures? Did the element of surprise alter outcomes?

My patients presenting with endocarditis involving both aortic and mitral valves and the fibrosa are frequently renal failure/dialysis patients. This series only had 6 (4%) patients with preoperative renal failure. Was dialysis an exclusionary factor for the procedure? What percentage of the patients had Marfan syndrome or a connective tissue disease? Did that affect outcomes?

The posted techniques and outcomes are the gold standard for aortic/mitral replacement and reconstruction of the intravalvular fibrosa that have been described by their pioneer. The review gives us a benchmark to strive for and outcomes that we might not be able to touch!

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