A 28-year-old man with endocarditis was admitted to our hospital. He had undergone mitral and aortic valve replacement with a mechanical prosthesis 6 months earlier. One month before the present admission, he had developed an intracerebral hemorrhage. Echocardiography showed a rocking aortic valve, extensive annular destruction, and vegetations on the mitral valve. Blood cultures were positive for *Staphylococcus aureus*, and appropriate antibiotic therapy was begun.

The patient was taken to surgery for reoperation. A standard aortotomy and a superior septal incision were made. Upon exploration, we found the rocking aortic valve, a noncoronary aortic wall and left fibrous trigone that were completely destroyed, and vegetations on the mitral valve (Fig. 1). After excision of all infected tissues, including the left fibrous trigone, the mitral and the aortic annuli became a single orifice (Fig. 2). A polytetrafluoroethylene (PTFE) patch was used to restore the mitral annulus and to anchor the new mitral prosthesis (Fig. 3). The rest of the patch was incorporated into the closure of the left atriotomy. A valved composite graft was used to restore aortic continuity. The noncoronary side of the graft was anchored to the patch (Fig. 4). During his recovery in the hospital, the patient experienced complete heart block, which necessitated permanent pacemaker implantation. The patient was discharged 2 weeks after the operation. At the 1-year follow-up visit, he was in good condition.
Destruction of the mitral annulus can occur as a result of aortic endocarditis. Obliteration of the left fibrous trigone is very rare and presents a surgical challenge. The defect can be repaired either by suturing the skirts of mitral and aortic valve prostheses to each other or by using a mitral–aortic composite patch technique. The choice depends on the degree of damage.

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Fig. 2 A) After removal of both of the prostheses and extensive débridement, the mitral and aortic annuli form a single orifice. B) The drawing shows the resultant defect after removal of both prostheses and excision of all infected tissues.

Fig. 3 Implantation of the new mitral valve prosthesis. A poly-tetrafluoroethylene (PTFE) patch is used to restore the continuity of the mitral annulus.

Fig. 4 A) A valved composite graft is used to restore aortic continuity. B) The drawing shows the noncoronary side of the graft anchored to the patch. The rest of the patch will be incorporated into the closure of the left atriotomy.
bined annuli for mitral and aortic valve replacement was first described by Rastan and associates in 1981.\textsuperscript{1} Radical reconstruction and replacement of the aortic root and the mitral orifice is the surgical technique of choice when aortic–mitral continuity is destroyed. This technique can be performed with an acceptable operative risk and good long-term results.

References