is of utmost importance to prevent such typical complications of cardiac tumors as stroke or embolism.

References
The patient was discharged 7 days after the procedure without complications. At 1-month follow-up, the patient was in functional class II. Echocardiography confirmed correct positioning of the bioprosthesis with a mean gradient of 6 mm Hg, aortic valve area of 1.8 cm$^2$, and trivial PAR.

**DISCUSSION**

The St Jude Medical Portico valve is the first fully resheathable percutaneous valve. It consists of a nitinol self-expanding stent with open cells partially covered by a porcine pericardial cuff, to decrease the risk of PAR, and leaflets of bovine pericardial tissue inserted in a low position for minimizing the protrusion of the stent into the left ventricular outflow tract (Figure 1, E). The 24F delivery system used for transapical approach is composed of a tapered nose cone, a capsule containing the compressed valve, and a handle with a thumbwheel that allows the release or resheathing of the valve while rotating clockwise or counterclockwise, respectively. The inner shaft contains a radiopaque marker that provides a reference point and contributes, as does the curved shape of the capsule, to a better valve alignment in the aortic annulus (Figure 1, F, white and black arrows, respectively). Prosthetic valve positioning remains a challenging step even for expert operators. Improper placement of the stent valve may contribute to some of the most feared complications associated with transcatheter aortic valve implantation, such as stent prosthesis embolization, PAR, mitral impingement, coronary obstruction, and conduction disorders.\(^2\) During recent years, new-generation transcatheter heart valves have emerged to overcome the shortcomings of the first-generation valves. The main differences among new-generation transcatheter valves implanted through the transapical approach are shown in Table 1. The St Jude Medical Portico prosthesis is currently the only device that is fully retrievable until fully deployed. Although that feature was not used in this case, it would be expected to be associated with a reduced risk of periprocedural complications related to malpositioning of the valve because it allows full control of the valve until final placement. Still, the potential positive impacts of these various features remain speculative.

Despite correct positioning of the bioprosthesis, initial mild-to-moderate aortic regurgitation was observed in this case, requiring balloon postdilatation, with a final trivial PAR. A high degree of valve calcification precluding the complete valve expansion may explain this finding. Inadequate initial radial force represents another...
speculative reason. In the recently reported initial experience with the 23-mm Portico THV implanted by the transfemoral approach, however, no postdilatation was used and only 1 in 10 patients had moderate residual aortic regurgitation, comparable to results obtained with other transcatheter valves.3

In addition, the sheathless delivery system used by the St Jude Medical Portico prosthesis is one of the smallest used for transcatheter aortic valve implantation by transapical access, which could prove an advantage in patients with frail apexes. Despite the lack of observed complications in this case, however, the absence of a sheath could be associated with apical tearing when the delivery system is removed and replaced with a sheath in case of the need of postdilatation.

In conclusion, this case reports the feasibility of the 23-mm St Jude Medical Portico THV implantation by the transapical approach. Despite this encouraging initial experience, future studies including a larger number of patients are required to demonstrate the safety and efficicacy of this new valve.

References
Sutureless aortic valve replacement in the presence of a mechanical mitral prosthesis

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Sutureless aortic valve replacement (AVR) has recently emerged as a promising alternative to standard AVR in patients who have severe aortic stenosis and face a high surgical risk.1 Because of the excellent survival associated with mechanical mitral valve replacement, it is expected that in the coming years an increasing number of elderly patients who are seen for aortic stenosis will have previously undergone mitral valve replacement. The presence of a mitral prosthesis is considered a contraindication to sutureless AVR, however, because it has been speculated to alter the geometry of the aortic root and left ventricular outflow tract, thus interfering with deployment and stability of the sutureless aortic bioprosthesis. Although transcatheter aortic valve implantation (TAVI) in the presence of a mitral prosthesis has been reported in the literature,2 this to our knowledge is the first case report to describe sutureless AVR in a patient with previous mitral valve replacement.

**CLINICAL SUMMARY**

A 75-year-old woman was admitted for progressive dyspnea of grade III to IV. The patient had a history of mitral stenosis, for which she had undergone mitral replacement 21 years earlier with a mechanical prosthesis (Carbomedics size 29 mm; Sorin Biomedica Cardio Srl, Saluggia, Italy). The history was also positive for hypertension, hyperlipidemia, chronic atrial fibrillation, and an embolic stroke at age 39 years, with residual hemiparesis of the left inferior limb. A transesophageal echocardiogram revealed the presence of severe aortic stenosis, with an aortic valve area of 0.3 cm² and a mean gradient of 39 mm Hg. The mitral prosthesis was totally functional, with no mitral regurgitation and a mean gradient of 3 mm Hg. The length of the aortomitral continuity was calculated at 10 mm (Figure 1). There was also severe tricuspid regurgitation. The left ventricular ejection fraction was 60%.

The logistic euroSCORE II was calculated at 19.7%. Surgical intervention was scheduled to correct the aortic stenosis and tricuspid regurgitation. A median sternotomy was performed, and cardiopulmonary bypass was initiated with atriobicaval cannulation. The patient underwent beating-heart tricuspid annuloplasty with a 30-mm Carpentier-Edwards Physio ring (Edwards Lifesciences Corp, Irvine, Calif), followed by sutureless AVR with a 23-mm Perceval S sutureless bioprosthesis (Sorin). Aortic crossclamp and cardiopulmonary bypass times were 31 and 63 minutes, respectively. Weaning from bypass was easy, and the patient was extubated on the same day.

The postoperative course was uneventful. The patient did not demonstrate any conduction abnormalities; however,