The performance of the implantable loop recorder with this indication is under investigation in 2 randomized studies, CRYPTONITE and CRISTAL AF. Both are prospective, multicenter studies in which an implantable loop recorder is deployed in patients who have recently had a stroke and whose full etiologic study is negative. To date, only 1 study of similar characteristics has been published. In that study, the Reveal Plus® 9526 monitor (Medtronic Inc., Minneapolis, United States) was implanted in 24 patients with the condition. After a mean follow-up of 14.5 months, AF had not been detected in any patients. The main limitation of the study is the device itself, which requires 32 consecutive beats at a frequency of more than 165 bpm to detect AF, which might not identify some AF episodes. While awaiting the results of the ongoing studies, our study indicates that the implantable loop device with an algorithm for the detection of AF is a tool that should be considered in the etiologic study of cryptogenic CVA. However, given the lack of a control group in our study and the high prevalence of AF in patients with this profile, no causal relationship can be established, although the technique does allow the initiation of appropriate antiplatelet treatment.

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Table

Characteristics of the 5 Patients in Whom Atrial Fibrillation Was Detected: CHA2DS2–VASc Score and the Characteristics of the Episodes

<table>
<thead>
<tr>
<th>Case</th>
<th>Age</th>
<th>Sex</th>
<th>Hypertension</th>
<th>DM</th>
<th>Prior CVA</th>
<th>CHF</th>
<th>Vascular disease</th>
<th>CHA2DS2–VASc</th>
<th>Episodes detected</th>
<th>Maximum duration, min</th>
<th>Time CVA-detection, months</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>80</td>
<td>M</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>2</td>
<td>69</td>
<td>M</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>4</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>67</td>
<td>M</td>
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<td>5</td>
<td>1</td>
<td>6</td>
<td>1</td>
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<tr>
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<td>F</td>
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<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>5</td>
<td>2</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

CHF, chronic heart failure or injection fraction <40%; CVA, cerebrovascular accident; DM, diabetes mellitus; F, female; M, male.

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REFERENCES


Direct Transfemoral Aortic Valve Implantation in a Patient With a Mechanical Mitral Prosthesis

Implantación transfemoral directa de válvula aórtica en paciente con prótesis mitral previa

To the Editor,

Transfemoral aortic valve implantation (TAVI) in patients with a mechanical mitral prosthesis is a challenging procedure, due to the potential for prosthesis underexpansion, the risk of embolization, and interference due to the mitral prosthesis poppets.

Balloon predilation of the stenotic valve has been considered an essential step for valve preparation in TAVI procedures. However, recent publications have shown the safety and efficacy of direct implantation without previous valvuloplasty, which would simplify the procedure and could help ensure greater prosthetic stability during deployment and a lower incidence of cerebral embolic complications.1,2

We describe the clinical case of an 81-year-old patient with severe aortic stenosis and an Edwards-Mira 27 mechanical mitral prosthesis who underwent direct TAVI with an Edwards-SAPIEN XT valve at our hospital, following admission to our hospital for dyspnea. On admission, tranesophageal echocardiography showed a moderately calcified tricuspid aortic valve, with symmetric opening and valvular area of 0.7 cm². A computed tomography scan showed an iliufemoral axis of good diameter, with a distance >7 mm between the aortic annulus and the mitral valve (Figs. 1A and B). Coronary angiography revealed severe disease in the anterior descending artery, treated with two overlapping stents; aortography ruled out significant aortic regurgitation (Fig. 2A, video 1).

A decision was made to implant a 23-mm Edwards-SAPIEN XT valve with no previous valvuloplasty. Good valve expansion was confirmed by fluoroscopy guidance (Fig. 2B, video 2) and tranesophageal echocardiography, and no perivalvular regurgitation (Fig. 2C, video 3) or prosthetic mitral valve interference (Fig. 2D) was observed after implantation. A predischarge computed tomography scan confirmed that both prostheses were in the correct position (Figs. 1C and D).

The presence of a mitral prosthesis was originally considered a formal contraindication for transcatheter aortic valve implantation, and these patients were excluded from the PARTNER (Placement of AoRTic TraNs cathETER valves) study. It was considered that the mitral annulus rigidity and the tighter space in the mitral-aortic plane could prevent adequate valve deployment, favor embolization, and increase the risk of underexpansion and malfunction due to mitral valve poppets interference. Rodés-Cabau et al.3 were the first to report transapical implant of an Edwards-SAPIEN valve in the presence of a mechanical mitral

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Figure 1. Computed tomography images before (A and B) and after (C and D) implantation.

Figure 2. A: Preimplantation aortography. B: Valve deployment. C: Final aortography. D: Anatomic relationship between the prostheses.
Dronedarone: An Option in the Treatment of Ventricular Arrhythmias


To the Editor,

The management of ventricular arrhythmias is complex and often requires the implantation of an implantable cardioverter-defibrillator (ICD). However, antiarrhythmic agents (AAA) continue to be relevant as a primary indication and as a way to reduce device-based therapies in patients with ICDs. However, patients often present contraindications that restrict AAA therapy to just a few options, such as amiodarone. Dronedarone is an AAA that has been proven effective in the control of atrial arrhythmias and may help patients with recurrent ventricular arrhythmias when other drugs cannot; however, information on its effectiveness in this clinical setting is scarce. We describe the use of dronedarone in 3 patients with ventricular arrhythmias who were unresponsive or intolerant to other AAs.

The first patient, a 53-year-old man with hypertension but without structural heart disease, had experienced frequent monomorphic premature ventricular beats since 2007. Treatment with atenolol and sotalol had failed. In February 2010, he was admitted after presenting with syncope and documented a nonsustained monomorphic ventricular tachycardia. An electrophysiology study was conducted and a sustained monomorphic ventricular tachycardia (SMVT) similar to the clinical arrhythmia was induced, as well as 2 other morphologies. Endocardial and epicardial mapping located the arrhythmogenic substrate in the superolateral aspect of the mitral annulus. The application of RF energy was not effective and thus intramyocardial reentry was suspected. Cardiac magnetic resonance imaging showed a scar in the anterolateral aspect of the left ventricle. An ICD was implanted and treatment with flecainide was initiated. Subsequent follow-ups showed that he had experienced numerous episodes of SMVT and received ICD shocks (Figs. 1 and 2). We decided to replace flecainide for dronedarone 400 mg every 12 h and to avoid the use of amiodarone due to its adverse effects. From that time on, and up to his final check-up 14 months later, there was a reduction in arrhythmia burden and the patient did not undergo ICD shocks or experience SMVT episodes, with the exception of 2 episodes that were suppressed by the initial antitachycardia pacing therapy.

The second patient, a 64-year-old man with hypertension but without apparent structural heart disease, had been followed up in another hospital since 2006 for ventricular tachycardia. Three ablation procedures had failed and an ICD was implanted in 2007. Initially, he was treated with metoprolol and subsequently with sotalol and multiple ICD shocks. In 2009, treatment with amiodarone and atenolol was initiated, which reduced the number of episodes. On 2 occasions in December 2011, he was admitted for...