Image in cardiology

Device to Narrow the Coronary Sinus in Refractory Angina

Dispositivo reductor del seno coronario en angina refractaria

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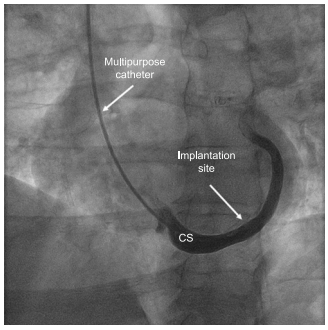

Figure 1.

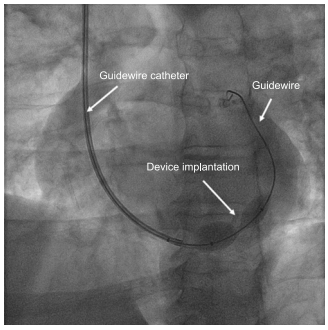

Figure 2.

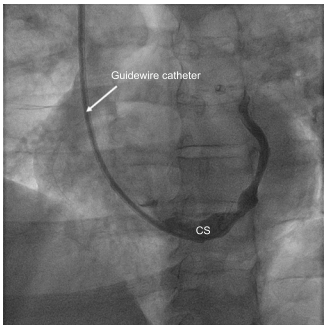

Figure 3.

Some patients with ischemic heart disease experience debilitating angina when there is no longer any possibility of revascularization. In a randomized study, implantation of a balloon-expandable, stainless steel, hourglass-shaped device (Reducer, Neovasc) in the coronary sinus (CS) was shown to effectively reduce angina severity in these patients. The images corresponding to the first procedure performed in Spain with this device are presented here. The patient had 3-vessel coronary artery disease, treated with stents in the proximal segments, but angina persisted due to distal disease refractory to maximum antianginal therapy.

The procedure was performed with local anesthetic under angiographic guidance. After internal jugular vein cannulation (9-Fr introducer), a multipurpose catheter was introduced into the CS and contrast was injected (Figure 1). This enabled the deployment site to be determined; it was therefore recommended not to change the projection until after implantation.

Subsequently, a 0.35'' guidewire was advanced to the distal portion of the CS, and the multipurpose catheter was exchanged for a catheter specific to the procedure. The device was advanced over the guidewire and deployed at 4-6 atm, until the device adapted to the size of the CS (Figure 2). After implantation, the balloon was carefully withdrawn and the outcome assessed with angiography once again (Figure 3). At 2 months after implantation, the patient's angina persisted and so he is among the 15% to 30% of patients who are considered nonresponders to this therapy.

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