Image in cardiology

Ventricular Tachycardia: Inferior Vena Cava Filter in a Case of Peripheral Vascular Disease

Taquicardia ventricular: filtro de vena cava inferior frente a vasculopatía periférica

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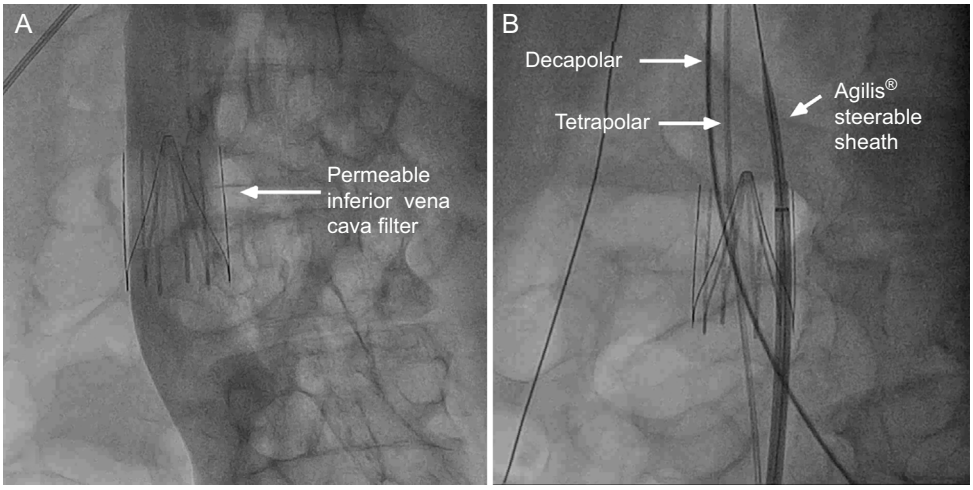

Figure.

The patient was a 69-year-old man with chronic ischemic heart disease, ventricular dysfunction, and multiple shocks from an implantable cardioverter-defibrillator, who was referred to us for ablation of incessant ventricular tachycardia. Despite having undergone placement of an inferior vena cava filter (IVCF) (VenaTech™, B. Braun) 14 years earlier, the presence of severe peripheral vascular disease made a retrograde aortic approach inadvisable and, thus, a transseptal approach was planned.

A venogram ruled out IVCF thrombosis (Figure A). Two diagnostic catheters (6 F) and a 0.032'' guidewire were advanced through the IVCF. The transseptal access sheath was advanced over the guidewire and, following puncture, was exchanged for a 10.5 F steerable sheath (Agilis®, St. Jude Medical) (Figure B, video 1 of the supplementary material). Ablation at the level of the entrance to the slow conduction channels left the patient noninducible. The catheters could be manipulated without resistance or displacement of the IVCF and were carefully withdrawn under fluoroscopic guidance without incident (video 2 of the supplementary material).

The presence of an IVCF is often considered a contraindication for procedures involving the use of the femoral venous system. As in the present case, when the retrograde aortic approach carries a high risk of vascular and/or embolic complications, venous access may be safer, despite the presence of an IVCF. On the other hand, the growing number of ablations at the level of left atrium, in which transseptal access is indispensable, makes knowledge of the possibility of safely passing through an IVCF especially relevant. It is necessary to evaluate the type of filter and the time since it was implanted, and to assess its permeability using angiography, prior to considering this approach.

SUPPLEMENTARY MATERIAL

Supplementary material associated with this article can be found in the online version available at doi:10.1016/j.rec.2015.10.022.

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