

Image in cardiology

Cardiac Resynchronization and Coronary Sinus Orifice Atresia



Resincronización cardíaca y atresia del orificio del seno coronario

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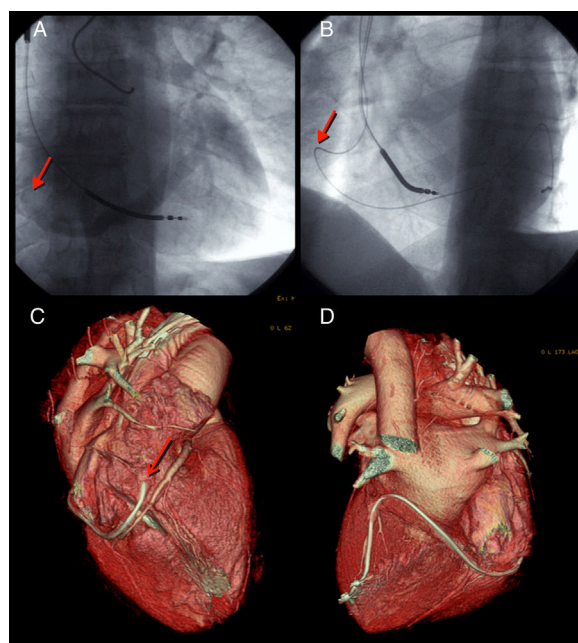


Figure.

Coronary sinus orifice atresia (CSOA) is an uncommon finding in patients without congenital heart disease. It has been reported in association with persistent left superior vena cava and abnormal coronary sinus (CS) drainage. Here we report the exceptional situation of drainage of the anterior wall of the right atrium.

The patient, who had dilated cardiomyopathy, was referred for resynchronization device implantation. Cannulation of the CS was not achieved at the first attempt. A second attempt was made, after coronary angiography of the late venous phase showing CSOA with SC drainage in the anterolateral wall of the atrium (Figures A and B; video 1 of the supplementary material). Selective cannulation of the orifice was achieved and the electrode was then selectively positioned in the only lateral vein that was sufficiently developed. The guidewire could not be distally advanced, which, along with selective venography of the Marshall vein (video 2 of the supplementary material), confirmed the absence of persistent left superior vena cava. These findings were subsequently characterized by computed tomography (Figures C and D). The CS orifice is shown with an arrow in the figure. The patient showed clinical improvement, with normalization of ventricular function and no relevant abnormalities after 7 years of follow-up.

Given the repercussion of these anatomical variations when implanting cardiac resynchronization devices, health professionals involved in the placement of pacing systems should be aware of these abnormalities and how to deal with them.

SUPPLEMENTARY MATERIAL



Supplementary material associated with this article can be found in the online version available at [doi:10.1016/j.rec.2017.06.016](https://doi.org/10.1016/j.rec.2017.06.016).

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