Image in cardiology

Left atrial appendage closure with 2 different devices



Cierre de orejuela con dos dispositivos distintos

Juan M. Ruiz-Nodar,* José L. Ibáñez Criado, and Vicente Climent Payá

Servicio de Cardiología, Hospital General Universitario de Alicante, Instituto de Investigación Sanitaria y Biomédica de Alicante (ISABIAL), Alicante, Spain

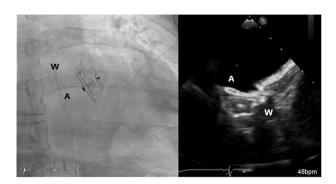




Figure 1.

Figure 2.

We present the case of a patient with permanent atrial fibrillation and contraindication for anticoagulation due to episodes of severe gastrointestinal bleeding. Percutaneous closure of the left atrial appendage was requested. Transesophageal echocardiography showed a left atrial appendage with 2 independent ostia whose closure with a single device would be technically impossible. We opted to start by treating the deeper ostium with a 21-mm WATCHMAN device (Boston Scientific; Natick, Massachusetts, USA) and wait a few months before tackling the closure of the second lobe (video 1 of the supplementary data). This was closed with a 25-mm Amulet device (Abbott Vascular; Santa Clara, California, USA), which completely sealed the lobe and whose "lid" could be adapted over the WATCHMAN (videos 2 and 3 of the supplementary data). Figure 1 shows the images captured during implantation (W, WATCHMANN; A, Amulet). This distinct closure mechanism (closure with a lid for the WATCHMAN and closure with a plug for the Amulet) allowed complete closure of the left atrial appendage with no leaks. Computed tomography was performed the following day (figure 2), which showed the complete closure of the 2 lobes; the superior lobe was closed in the first procedure with the WATCHMAN, now thrombosed.

This closure of the left atrial appendage with 2 different devices is the first to be reported in the literature and in our opinion should be considered an interesting option and perhaps the option of choice for this type of bilobar appendage, whose closure with 2 identical devices has not shown such efficacy. We recommend the approach of first closing the deep lobe with the WATCHMAN device and then closing the second lobe with the Amulet device.

CONFLICTS OF INTEREST

J.M. Ruiz-Nodar is a proctor for Boston Scientific.

APPENDIX. SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version, at https://doi.org/10.1016/j.rec.2019.06.012.

^{*} Corresponding author: E-mail address: ruiz_jmi@gva.es (J.M. Ruiz-Nodar).