

## Image in cardiology

## Double LAmBRE occlusion technique for extra-large and shallow left atrial appendage



## Técnica de doble LAmBRE para cierre de orejuela extragrande y con poca profundidad

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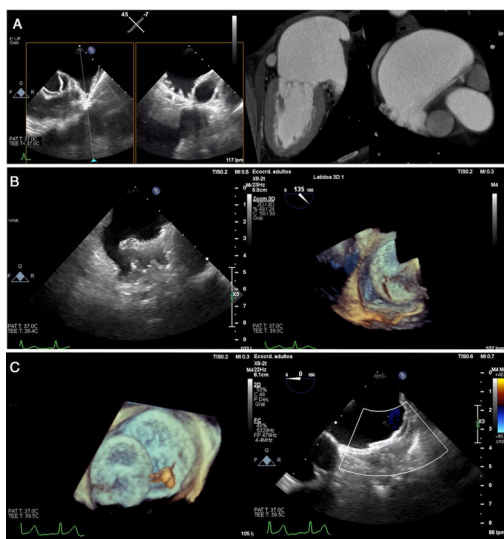


Figure 1.

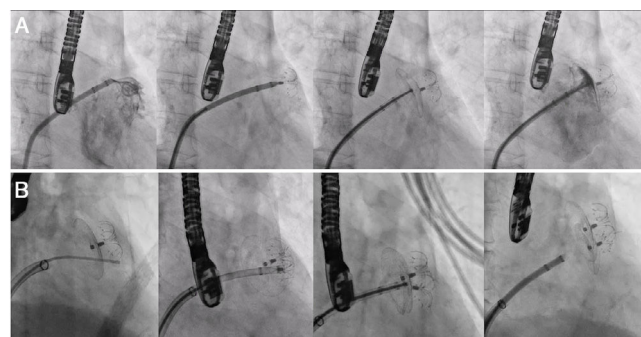


Figure 2.

A 74 year-old male was referred for elective left atrial appendage occlusion (LAAO). Computed tomography (CT) and transesophageal echocardiogram revealed an extremely large and shallow cauliflower-shaped left atrial appendage (LAA) with an ostial diameter of 41x26 mm and only 15 mm of maximal depth (figure 1A and video 1 of the supplementary data).

It was decided to perform a double-device LAAO strategy. Initially a 24/36 LAmBRE device (Lifetech Scientific (Shenzhen) Co., China) was deployed covering the anterior aspect of the LAA ostium. Then a 14F steerable sheath was advanced and using a MP 5F catheter a stiff wire was located into the posterior aspect of the LAA (figure 1B and figure 2A). A 10F delivery sheath was advanced over the wire and a 16/30 LAmBRE device was deployed without any complications achieving complete LAA sealing (figure 1C, figure 2B, and video 2 of the supplementary data).

The combination of large and shallow LAA could make LAAO extremely challenge. To the best of our knowledge, the present case reports the largest LAA occluded up to now. A double LAAO-dedicated-device technique with the Watchman (Boston Scientific, USA) device has been previously reported.<sup>1</sup> However, in this particular case, it seems exceptionally difficult to use the Watchman or even the new Watchman FLX device. Even more, the limited depth prevented the use of Amulet device (Abbott Laboratories, USA). On the other hand, LAmBRE presents unique features including device flexibility, enhanced anchoring mechanisms and special design sizes combining a small-dimensioned umbrella with significantly larger discs. From our point of view, LAmBRE is particularly advantageous to perform a dual-device LAAO procedure in extremely complex anatomies.

## CONFLICTS OF INTEREST

I. Cruz-González is proctor for Lifetech Scientific.

## APPENDIX. SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version available at <https://doi.org/10.1016/j.rec.2020.05.005>

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