Letter to the Editor

Percutaneous left atrial appendage closure in the presence of thrombus: the safer, the better

Cierre percutáneo de la orejuela izquierda en presencia de trombo: cuanto más seguro, mejor

To the Editor,

We have read with great interest the article by Fontenla et al.[1] regarding left atrial appendage closure (LAAC) in the presence of thrombus. First, we would like to congratulate the authors for their initiative and for the work performed for this indication, which is an off-label use of occlusion devices. Although the presence of thrombus in the atrial appendage continues to be an absolute contraindication to LAAC, given that it is a major embolic risk factor,[2] it also represents a complex clinical situation when there is contraindication to anticoagulant therapy or a thrombus is present despite adequate anticoagulant therapy. Accordingly, a careful analysis is required of the risk-benefit ratio when this type of procedure is performed in patients with high risk of embolization.

In a single-center series of 76 patients, Fontenla et al. report the prevalence of thrombus in the atrial appendage of patients referred for LAAC, focusing on the technical aspects and outcomes of this type of procedure.

The technical aspects highlighted by the authors to reduce embolic risk are mainly aimed at avoiding the manipulation of the material and the introduction of contrast agent into the atrial appendage. However, no mention is made of the main characteristic that we believe should be possessed by any device of this type: that its release can be initiated from outside the atrial appendage itself. In this way, the partially released device blocks the migration of the contained thrombus, before ultimately being settling in the corresponding atrial appendage and thereby closing the structure. Although this strategy is allowed by most devices currently used for atrial appendage closure, it was not possible with the Watchman 2.5 device (Boston Scientific, United States), which was widely used and the basis of much of the current scientific evidence, because the sheath had to be introduced into the atrial appendage to release the device. The new Watchman FLX is a more versatile device that allows this technical possibility.[3]

In addition, we believe that cardiac computed tomography provides added value in this type of patient because it enables elucidation of the anatomical viability of the procedure. Tomography allows determination of thrombus location and size and gives accurate information on atrial appendage morphology (thereby identifying complex anatomy) and the depth, number, and size of the lobes. At the same time, it facilitates calculation of the angle between the ostium and atrial appendage body, which can limit the "real" depth at which the device can be seated.[4] The operator must consider all of this information to optimize the implantation and thereby minimize the embolic risk.

LAAC was developed as an alternative to oral anticoagulation for ischemic stroke prevention in patients with atrial fibrillation; this fact becomes more important in patients who have already had at least 1 stroke, as in the series by Fontenla et al. Although we agree with the authors that embolic protection devices currently lack robust scientific evidence in this setting, their ease of placement and the short time required make their use increasingly more widespread.[5] We believe that the embolic risk should be carefully assessed before the procedure. If the safety of the procedure cannot be guaranteed, our group recommends this type of device despite the lack of evidence.

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https://doi.org/10.1016/j.rec.2021.04.011
https://doi.org/10.1016/j.rec.2021.06.015

FUNDING

None.

AUTHORS' CONTRIBUTIONS

Manuscript conception: F. Torres-Saura; manuscript writing: F. Torres-Saura, E. Arroyo-Úcar; critical revision: I. Cruz-González, E. R. Centurión-Inda.

CONFLICTS OF INTEREST

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https://doi.org/10.1016/j.rec.2021.06.015