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EDITORIAL COMMENT

Combined MitraClip implantation and left atrial appendage occlusion - ''because it's there'' revisited☆

Implantação simultânea de MitraClip e encerramento do apêndice auricular esquerdo – ''because it's there'' revisitado?

Duarte Nuno Cacela

Hospital de Santa Marta, Centro Hospitalar de Lisboa Central, Lisboa, Portugal

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In an interview with the New York Times in 1923, George Mallory, who was to die on his third attempt to climb Mount Everest (his body was not found until in 1999), was asked why he wanted to climb the mountain. His reply was ''Because it's there''.

This phrase has since become iconic, used to justify any action or ambition that otherwise has no justification.

In their article published in this issue of the *Journal* on their experience with simultaneous MitraClip implantation and left atrial appendage occlusion,[1] Francisco et al. describe five patients who underwent this combined procedure, with excellent results, both procedural and in a mean follow-up of 243±70.7 days.

The rationale for combining the two procedures is attractive, since both require transseptal access. MitraClip implantation is one of the few interventional cardiology procedures that do not require administration of contrast, reducing the likelihood of contrast overload, an important factor in patients with multiple comorbidities that often include renal dysfunction.

Combining the two procedures also has the advantages of reducing costs, the time that patients must suspend or change their anticoagulant therapy, vascular complications (since only a single vascular access is required), and total fluoroscopy time, as well as avoiding the additive effect of two residual interatrial septal communications. The main disadvantage is longer procedure time.

If, as the authors show, the reference transseptal puncture for the MitraClip – which differs from the ideal puncture site for left atrial appendage (LAA) closure – does not hinder implantation of the Watchman device, the combination appears to make even more sense.

Given all this, what is the weakest point in this combined procedure? In my opinion it is the indication for LAA closure, which, as the authors point out, is only a class IIb indication in the European Society of Cardiology guidelines. The procedure is the subject of ongoing controversy, the most famous example of which was John Mandrola's article ''Left atrial appendage closure should stop now''[2] in November 2016.

In this regard the approach of Francisco et al. was flawless, restricting LAA closure to patients with firm indications for the procedure: comorbidities directly affecting bleeding risk associated with anticoagulant therapy (liver cirrhosis, previous stroke under oral anticoagulation, chronic anemia with intestinal angiodysplasia, documented labile INR, and chronic use of non-steroidal anti-inflammatory drugs due to degenerative osteoarticular disease). The patients selected for this approach were clearly those with a worse risk profile: three were ineligible for the EVEREST II trial[3] due to ejection fraction (EF) <25% (in EVEREST II the mean EF was 60%, compared to 26% in the series under discussion) and, more directly relevant to LAA closure, a mean CHA_2DS_2-VASc score of 4.5±0.6 and mean HAS-BLED score of 3.5±0.6. In the largest series published to date on the Watchman device,

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E-mail address: dcacela@hotmail.com

a meta-analysis[4] of 2406 patients from the PROTECT AF and PREVAIL trials and their respective registries, the CHA_2DS_2-VASc score ranged between 3.5±1.6 and 4.3±1.3, while the proportion of patients with a HAS-BLED score ≥3 varied between 19.9 and 36.2%. In the series by Francisco et al., all had a HAS-BLED score ≥3.

In the only published study comparing the combined procedure with standalone MitraClip implantation, Kuwata et al.[5] drew similar conclusions to the Portuguese authors in terms of safety, feasibility and short-term efficacy. In the series by Kuwata et al., in a population with mean EF of 54% and using Amplatzer and Amulet devices, procedure time (90 min vs. 66 min) and fluoroscopy time (32 min vs. 18 min) were the only parameters that differed significantly. The short follow-up in both series is perhaps their greatest limitation, since it leaves open the question of medium- and long-term clinical benefit, including survival, particularly regarding LAA closure, which is the more controversial intervention.[6]

In view of the above, considering the low probability of a randomized trial being conducted between the standalone and combined approaches, I believe that the study by Francisco et al., with its scrupulous selection of patients for this combined procedure, provides good evidence that associating MitraClip implantation and LAA closure with the Watchman device is feasible, safe and, at least in the short term, effective. In the cases they present, it was not simply ''Because it's there'', but rather ''and last but not least, because it's there'', and for this they are to be congratulated.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Francisco A, Oliveira E, Menezes M, et al. Combined MitraClip implantation and left atrial appendage occlusion using the Watchman device: a case series from a referral center. Rev Port Cardiol. 2017;36:525–32.
2. Mandrola J. Left atrial appendage closure should stop now (www.medscape.com/viewarticle/871678). Theheartorg on Medscape. 2016. November 10.
3. FeldmanT, Foster E, Glower D, et al., for the EVEREST II Investigators. Percutaneous repair or surgery for mitral regurgitation. N Engl J Med. 2011;364:1395–406.
4. Holmes D, Doshi S, Kar S, et al. Left atrial appendage closure as an alternative to warfarin for stroke prevention in atrial fibrillation: a patient-level meta-analysis. J Am Coll Cardiol. 2015;65:2614–23.
5. Kuwata S, Taramasso M, Zuber M, et al. Feasibility of concomitant MitraClip and left atrial appendage occlusion. Euro Intervention. 2016, http://dx.doi.org/10.4244/EIJ-D-16-00784. Jaa-068 2016.
6. Waks J, Manning W. Left atrial appendage closure to reduce the risk of thromboembolic complications in atrial fibrillation; Pay now and possibly pay later? J Am Coll Cardiol. 2015;65:2624–7.