

Major Cardiovascular Events After Cavotricuspid Isthmus Ablation: Withdraw Of Oral Anticoagulation

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INTRODUCTION

- ✓ Cavotricuspid isthmus ablation (CTA) is the 1st-line therapy to accomplish rhythm control in patients with typical atrial flutter (AFL).
- ✓ While AF embolic risk is well established, data regarding AFL and formal recommendations for long-term (LT) anticoagulation (OAC) after CTA in patients with isolated AFL are lacking.

Purpose:

→ Determine the risk of major adverse cardiovascular events (MACE) after CTA and to compared it in relation to the presence of concomitant AF, simultaneous pulmonary vein isolation (PVI) and persistence on LT OAC.

METHODS

- ✓ Retrospective single-center study of patients submitted to CTA 2015-2019 (3 groups)

I: Lone AFL patients

II: AFL patients with prior AF submitted to CTA

III: AFL patients with prior AF submitted to CTA+PVI.

- ✓ Clinical records were analyzed for MACE (cardiovascular or unknown cause of death, stroke, clinically relevant bleed or hospitalization due to heart failure or arrhythmic events) during follow up
- ✓ LT OAC was defined as persistence of OAC therapy over 18 months after CTA.

Statistical analysis:

- Kaplan Meier survival curves were used to estimate the risk of events and the groups were compared using uni- and multivariate Cox regression analyses.

RESULTS

2015→2019

- ✓ 476 patients submitted to CTA
- ✓ Median follow-up: 2.8Y
- ✓ 80% males; median age: 66±12Y

Group	N, age (p<0.03)
I	284 (60%), 68±12Y
II	109 (23%), 67±11Y
III	83 (17%), 61±11Y

- ✓ Similar baseline characteristics except age
- ✓ Mean baseline CHA₂DS₂VASc: 2.3±1

The 1, 3 and 5Y MACE was 6.8, 21.1 and 32.1% respectively **without differences between groups.**

105 patients suspended OAC on the long term (mean: 241 days post-CTA)

Group I

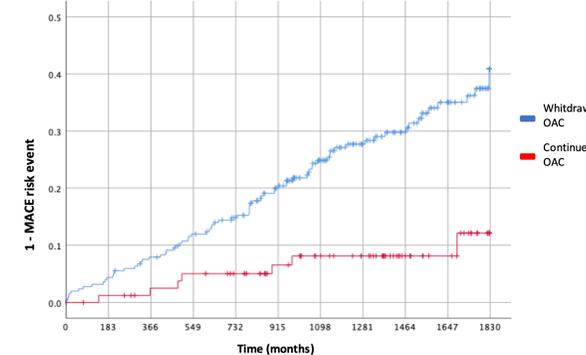
→ OAC suspension in 56 patients that were younger (65±11 vs. 69±12, p=0.002); with (lower) CHA₂DS₂VASc (1.9±1.6 vs. 2.7±1.4, p<0.001) and with less comorbidities.

→ Significantly associated with **lower MACE risk** (HR: 0.26, 95%CI 0.12-0.56, p=0.001), independently of the age and CHA₂DS₂VASc (also a prognostic predictor, HR:1.28, 95%CI 1.08-1.53, p=0.005).

70% relative risk reduction in the 5Y MACE
16.1 vs 42.9%: HR: 0.30, 95%CI 0.13-0.69, p=0.005

The prognostic benefit of OAC suspension was driven by the **group I** and did not occurred in patients with concomitant AF.

5-year MACE risk – regarding withdraw of OAC in group I



CONCLUSION

- In AFL patients submitted to CTA, long term risk of MACE was high, even in those without prior concomitant AF. Among patients with prior AF documented with typical AFL submitted to successful CTA, the long term prognosis was similar. In patients with lone AFL submitted to successful CTA, it may be reasonable to **suspend OAC** within **18 months** provided that **concomitant AF is carefully excluded during follow up.**