

CHA2DS2VASC SCORE IN ATRIAL FLUTTER: IS IT AS RELIABLE AS IT SHOULD BE?

Pedro Alves da Silva (1); Tiago Rodrigues (1); Nelson Cunha (1); Pedro Silvério António (1); Sara Couto Pereira(1); Joana Brito (1); Beatriz Silva (1); Gustavo Lima da Silva (1); Nuno Cortez-Dias (1); Fausto J. Pinto(1); João de Sousa (1)
 (1) Serviço de Cardiologia, Departamento Coração e Vasos, CHULN, CCUL, Faculdade de Medicina, Universidade de Lisboa, Lisboa, Portugal

INTRODUCTION

- CHA2DS2VASC score is a well established prognostic score in atrial fibrillation (AF) population.
- However, when it comes to patients with isolated atrial flutter no prognostic scores are defined, regarding the embolic risk in this population.

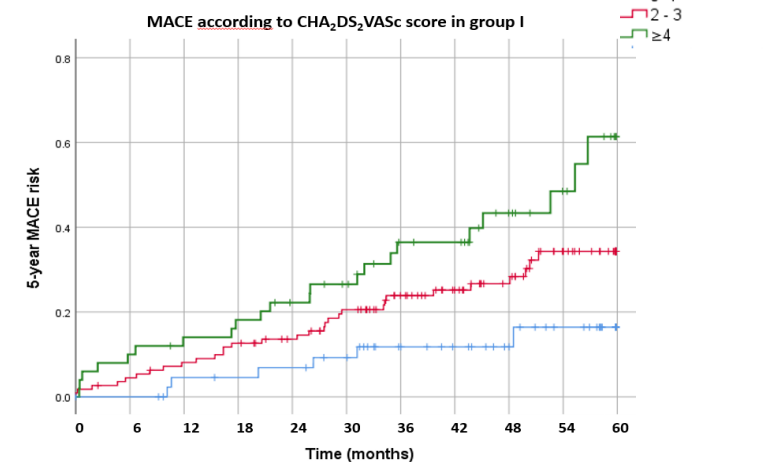
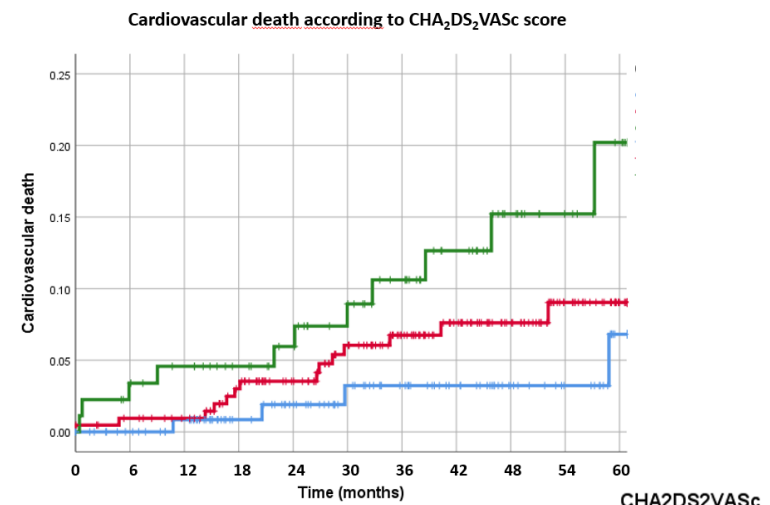
OBJECTIVE

- To evaluate the capacity of CHA2DS2VASC score to predict cardiovascular death and major adverse cardiovascular events (MACE) in patients (pts) with atrial flutter (AFL).

METHODS

- Single-center retrospective study of pts submitted to cavo-tricuspid isthmus ablation (CTA) between 2015 and 2019, comprising two groups: I – pts with lone AFL; II – patients with AFL and prior AF.
- Clinical records were analyzed to determine the occurrence of MACE during the long-term follow up, defined as death, stroke, clinically relevant bleed or hospitalization due to heart failure or arrhythmic events. CHA2DS2VASC score was categorized into 3 groups: 0-1; 2-3; and >4.
- 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



RESULTS

- 476 pts (66±12 years, 80% males) underwent CTA; II – 192 pts (40%).
 - Group I [lone AFL] 284 pts (60%)
 - Group II [AFL + prior AF] 192 pts (40%)
- Baseline characteristics were similar between groups, except for age with group I pts being older (68±12, 64±11, p<0.01).
- Mean baseline CHA2DS2VASC was 2.3±1.5 and the median post-CTA follow-up was 2.8 years.
- CHA2DS2VASC score was an independent predictor of cardiovascular death (OR: 1.49 95%CI 1.09-1.79, p=0.08) and was a predictor of MACE even after adjustment for the diagnose of prior AF (OR 1.88, 95% IC 1.094-3.249, p=0.022).
- In pts in Group I: CHA2DS2VASC score was a predictor of MACE (OR 3.03, 95% CI 1.112-8.278, p=0.03) after adjustment for sex and age.
 - Regarding the different MACE components, the score was a predictor of stroke (OR 4.45, IC 1.66-13.39, p=0.04).
 - CHA2DS2VASC score did not predict cardiovascular death.

CONCLUSIONS

- In our population CHA2DS2VASC score was able to predict MACE events and stroke in patients with isolated atrial flutter. This suggests that, in the future, CHA2DS2VASC score could be applied to establish embolic risk in atrial flutter.