# Withdrawal of anti-arrhythmic therapy after cavo-tricuspid isthmus ablation of typical atrial flutter

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**Introduction:** Medical management of typical atrial flutter (AFL) is sometimes unsuccessful and may have adverse effects. Symptom control using radiofrequency cavo-tricuspid isthmus ablation (CTA) is a feasible alternative, given the fact that it is a simple procedure with a low rate of complications. However, in some patients (pts), new atrial arrhythmias may develop and the decision of anti-arrhythmic therapy (AAT) withdrawal is usually patient-based.

**Purpose:** To predict the recurrence of atrial arrhythmias (AR) after CTI ablation between pts that suspended AAT and those that maintained AAT.

**Methods:** Single-center retrospective study of pts with typical AFL submitted to ablation between 2015 and 2019. Pts clinical characteristics, current and follow up therapy were collected. Holter and/or 7-day event loop recorder were performed during the follow up to identify AR. For statistical analysis, we applied Chi-square, Mann-Whitney and Cox regression to identify predictors of AR.

**Results:** CTA ablation was performed in 476 pts (mean age: 66.3 ± 11.7 years, 79.8% males). At time of ablation most pts were in EHRA II class (70.8%) and 44.6% of pts had at least mild left atrial dilatation on transthoracic echocardiography. The mean follow up time was 2.8 years.

Two-hundred sixty-nine pts (57,6%) were under anti-arrhythmic therapy (AAT) before the ablation. After the procedure, 58 pts withdrawn AAT before AR and 8 pts after AR. During the follow-up period, we observed AR of typical AFL in 17 pts (3.6%), atypical AFL in 35 pts (7.4%) and AF in 118 pts (24.8%).

There were no statistically significant differences regarding AR between pts that maintained and suspended AAT (p = NS). Concerning the pts that suspended AAT, thyroid disfunction (p = 0.012), higher CHADs-VASc score (p = 0.033), ischemic cardiomyopathy (p = 0.001) and tobacco abuse (p = 0.005) were predictors of AR, being the last two also independent predictors (HR 0.243; 95%CI 0.76-0.778, p = 0.017; HR 4.449; 95%CI 1.128-17.553, p = 0.033, respectively).

**Conclusion:** After CTA ablation, AF is the most frequent recurrent arrhythmia. Interestingly, the withdrawn of AAT didn't seem to predict the recurrence of arrhythmic events. The decision of stopping AAT must be individualized regarding patients' clinical characteristics.

Abstract Figure 1: AAT withdrawal and AR