## How to manage post AF ablation patients in different scenarios: Case based panel discussion

Arash Arya, M.D.





#### Disclosures: NONE

Presentation available for download at: www.arasharya.com

#### Overview:

Antiarrhythmics after catheter ablation.

Anticoagulation after catheter ablation.

Frequent ATs after catheter ablation.

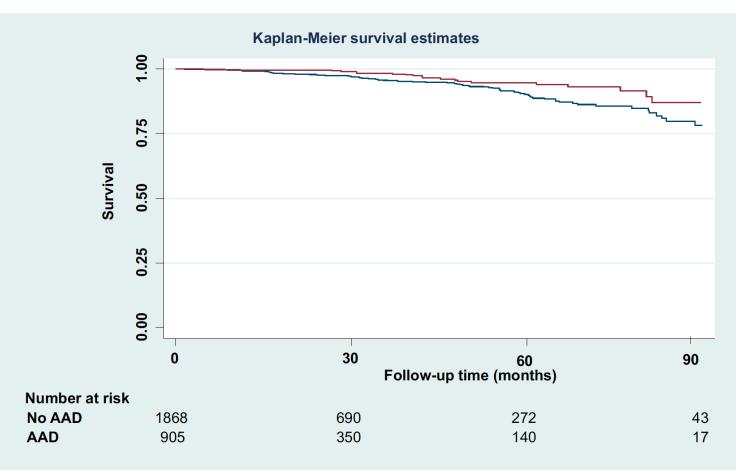
## Antiarrhythmics after catheter ablation

# Antiarrhythmic drug therapy and all-cause mortality after catheter ablation of atrial fibrillation: A propensity-matched analysis

Shantha et al. Hearth Rhythm 2019: In Press

#### SAFETY FIRST →

There were 3624 consecutive patients with AF (mean age: 59±11 years, women: 27%, paroxysmal AF: 58%). An AAD was used in 2253 patients (62%, AAD group) for a mean duration of 1.3±0.8 years, during a mean follow-up of 6.7±2.2 years after CA of AF.



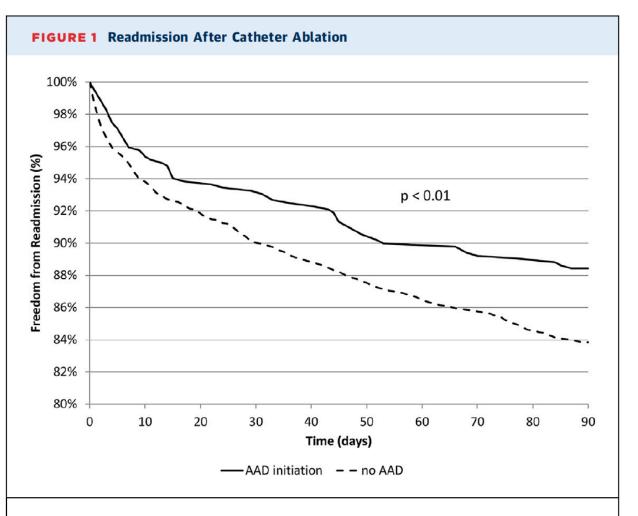
**Red**: with AAD, Adjusted P: 0.05, for patients with LVEF≤35% 0.07, For those > 75y, 0.07

## Effect of Antiarrhythmic Drug Initiation on Readmission After Catheter Ablation for Atrial Fibrillation

J Am Coll Cardiol EP 2015;1:238-44

TABLE 2 Antiarrhythmic Drugs Prescribed				
Any AAD	519			
Amiodarone	150 (28.9)			
Dronedarone	102 (19.7)			
Class Ic agents	145 (27.9)			
Flecainide	90 (17.3)			
Propafenone	55 (10.6)			
Class III agents	120 (23.1)			
Dofetilide	20 (3.9)			
Sotalol	100 (19.3)			
Disopyramide	2 (0.4)			
Values are n or n (%).				
AAD = antiarrhythmic drug.				

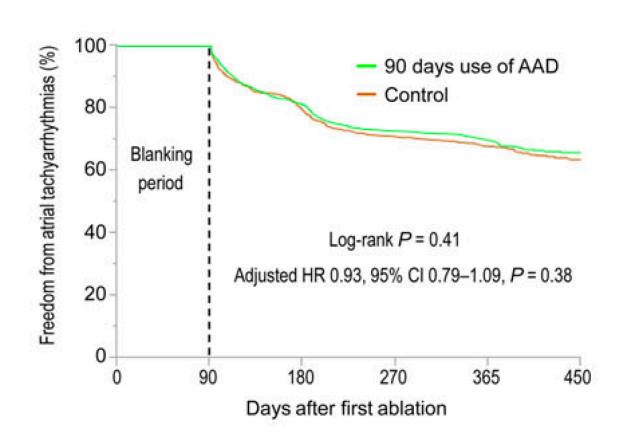
Initiation of an AAD at discharge of catheter ablation is associated with a significant reduction in readmission within 90 days. Routine initiation of an AAD after catheter ablation may reduce healthcare utilization in the peri-ablation period.

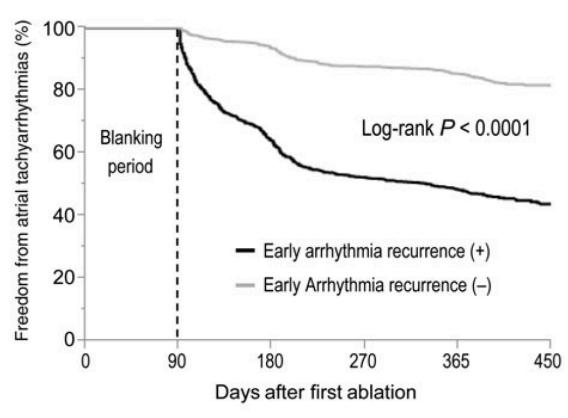


Freedom from readmission after catheter ablation for atrial fibrillation among patients with and without AAD treatment.

#### Efficacy of Antiarrhythmic Drugs Short-Term Use After Catheter Ablation for Atrial Fibrillation (EAST-AF) trial

doi:10.1093/eurheartj/ehv501





## Antiarrhythmic drugs after ablation for atrial fibrillation: the hope, the hype, and the reality

Luis R. Scott\*

Eur Heart J. 2016 Feb 14;37(7):619-20.

#### Take-Home-Message:

- (1) The occurrence of atrial tachyarrhythmias in the blanking period is associated with a greater chance of long-term AF relapse.
- (2) Giving short-term AAD treatment post-ablation is an acceptable practice to be incorporated into clinical practice in order to reduce early AF recurrences and healthcare utilization.
- (3) Short-term AAD therapy is helpful and safe in the first 90 days following ablation by reducing atrial tachyarrhythmias; however, it has no effect on the long-term outcomes of AF-free survival at the end of 1 year. This result is **independent of the type of AF**, paroxysmal, persistent, or long standing, **or the type of ablation strategy** performed.

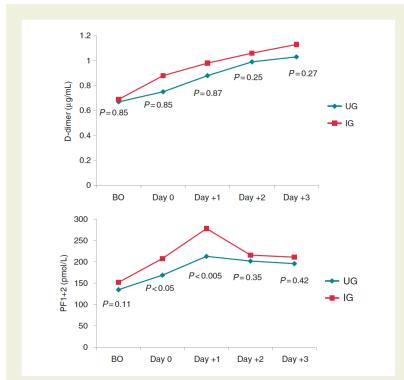
### Anticoagulation after catheter ablation

Impact of periprocedural anticoagulation therapy on the incidence of silent stroke after atrial fibrillation ablation in patients receiving direct oral anticoagulants: uninterrupted vs. interrupted by one dose strategy

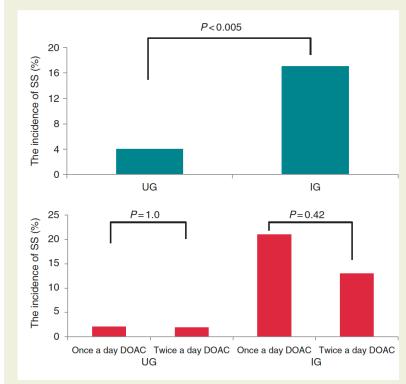
Nagao et al. Europace 2019. doi:10.1093/europace/euy224

Our study demonstrated that the incidence of SS in the IG was significantly higher than that in the UG. In addition, the incidences of symptomatic ischemic stroke/TIA or SS were similar between patients taking once daily DOACs and twice daily DOACs in the IG.

<u>UG</u>	Day MD	-2 ND	Da MD	y-1 ND	Operati MD	ion day ND	Day MD	/ +1 ND	Day MD	/ +2 ND
Once a day DOAC	•		•		•		•		•	
Twice a day DOAC	•	•	•	•	•	•	•	•	•	•
<u>IG</u>										
Once a day DOAC	•		•				•		•	
Twice a day DOAC	•	•	•	•		•	•	•	•	•



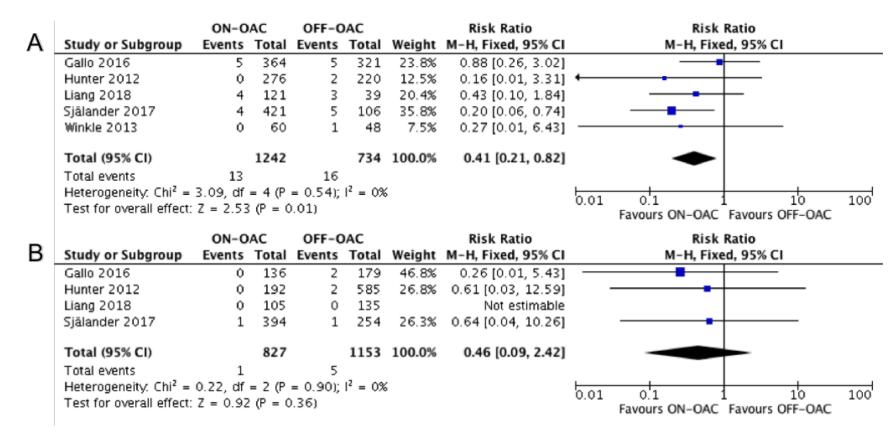
**Figure 3** The trends for coagulation markers including mean D-dimer and PF1 + 2 values in the UG and the IG. BO, before operation; IG, interrupted group, PF1 + 2, prothrombin fragment 1 + 2; UG, uninterrupted group.



**Figure 2** The comparison of the incidence of periprocedural SS in both the anticoagulant groups. DOAC, direct oral anticoagulant; IG, interrupted group; SS, silent stroke; UG, uninterrupted group.

## Oral anticoagulation after catheter ablation of atrial fibrillation and the associated risk of thromboembolic events and intracranial hemorrhage: A systematic review and meta-analysis

Romero et al. JCE 2019: In Press



A:  $CHA_2DS_2VASC \ge 2$ ; B:  $CHA_2DS_2VASC \le 1$ 

#### But it is not all about Stroke!

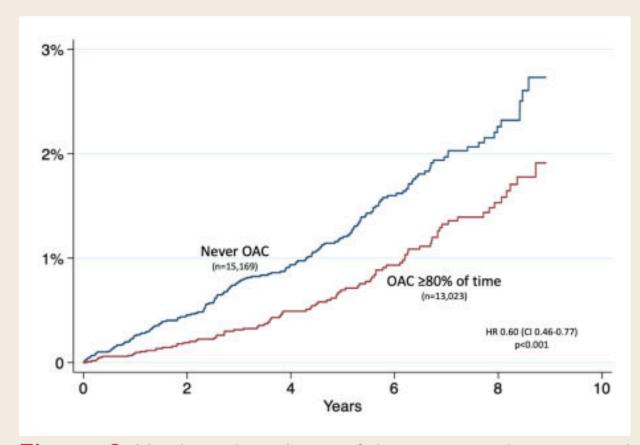
Less dementia and stroke in low-risk patients

with atrial fibrillation taking oral anticoagulation

Friberg et al. European Heart Journal (2019) 40, 2327–2335

Low-risk AF patients who take OAC have lower risk of dementia than those who do not use OAC. Patients age >65 years appear to benefit from OAC treatment irrespective of stroke risk score.

CHA<sub>2</sub>DS<sub>2</sub>VASC ≤ 1



**Figure 2** Unadjusted incidence of dementia in relation to oral anticoagulant treatment.

### Suggested Reading:

# Atrial Fibrillation and Cognitive Impairment: New Insights and Future Directions

Alireza Sepehri Shamloo, MD\*, Nikolas Dagres, MD, Andreas Müssigbrodt, MD, Annina Stauber, MD, Simon Kircher, MD, Sergio Richter, MD, Boris Dinov, MD, Livio Bertagnolli, MD, Daniela Husser-Bollmann, MD, Andreas Bollmann, MD, PhD, Gerhard Hindricks, MD, Arash Arya, MD

Department of Electrophysiology, Heart Center Leipzig at University of Leipzig, Leipzig, Germany

Received 30 January 2019; received in revised form 13 May 2019; accepted 30 May 2019; online published-ahead-of-print xxx

Heart Lung Circ. 2019: In Press

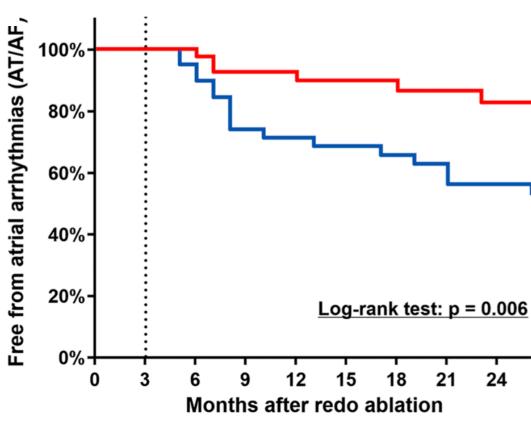
## Frequent ATs after catheter ablation

#### RESEARCH ARTICLE

Which patients recur as atrial tachycardia rather than atrial fibrillation after catheter ablation of atrial fibrillation?

Yang et al. PLoS ONE 2017;12(11): e0188326

- Recurrence as AT after de novo ablation
- Recurrence as AF after de novo ablation



#### Conclusion

The degree of LA remodeling is significantly associated with recurrence as AT after AF ablation, irrespective of potential ablation gap in linear lesion.

# Optimal rhythm-control strategy for recurrent atrial tachycardia after catheter ablation of persistent atrial fibrillation: a randomized clinical trial

Zhang et al. European Heart Journal (2014) 35, 1327-1334

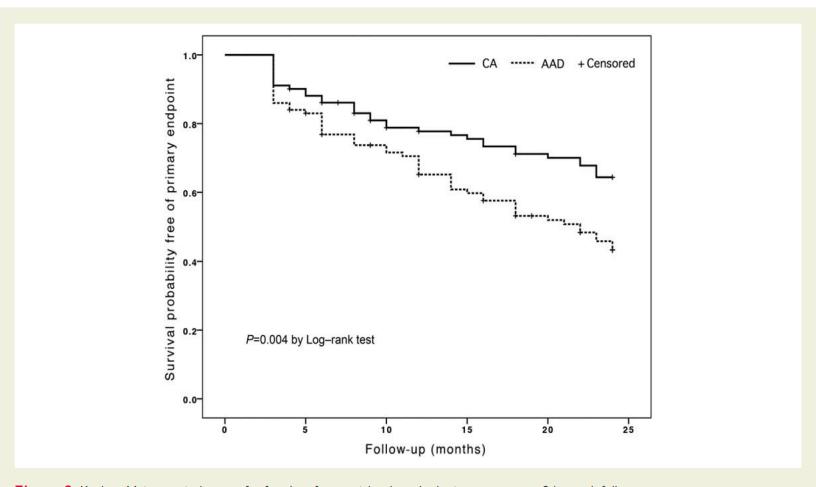


Figure 2 Kaplan—Meier survival curves for freedom from atrial tachyarrhythmia recurrence at 24-month follow-up.

### Suggested Reading:

Is epicardial fat tissue associated with atrial fibrillation recurrence after ablation? A systematic review and meta-analysis



Alireza Sepehri Shamloo \*, Nikolaos Dagres, Boris Dinov, Philipp Sommer, Daniella Husser-Bollmann, Andreas Bollmann, Gerhard Hindricks, Arash Arya

Department of Electrophysiology, Heart Center Leipzig at University of Leipzig, Leipzig, Germany

Int J Cardiol Heart Vasc. 2019 Jan 26;22:132-138