



EARLIER ABLATION FOR ATRIAL FIBRILLATION

ATRIAL FIBRILLATION IS A HIGHLY PROGRESSIVE DISEASE THAT INDUCES STRUCTURAL REMODELING OF THE HEART, POTENTIALLY LEADING TO MORE FREQUENT OR PERMANENT ARRHYTHMIA OVERTIME IF TREATMENT IS DELAYED.^{1,2}

Earlier restoration of sinus rhythm by catheter ablation in patients with Atrial Fibrillation (AFib) may reduce patient morbidity and disease progression, improve long-term procedural success, and lower overall patient mortality.^{2,3}

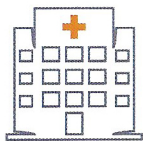
Patients who have longer diagnosis-to-ablation times (DAT) experience higher rates of transient ischemic attacks, stroke and heart failure, as compared to patients who receive ablation earlier.^{4,5}



**UP TO 60%
LOWER RATE OF
TIA/CVA EVENTS**

In a prospective registry of 1000 AFib patients, **patients receiving ablation with a shorter DAT had a 60% lower rate of TIA/CVA events** compared to patients with a longer DAT⁵

*Relative reduction from the comparison of 244 patients with DAT of ≤ 11 months versus 250 patients with a DAT of ≥ 71 months at 5 year follow-up. TIA/CVA were defined as a transient or persistent neurological deficit diagnosed by a neurologist. Differences were significant where p<0.001.



**UP TO 41%
LOWER RATE OF
HEART FAILURE
HOSPITALIZATION**

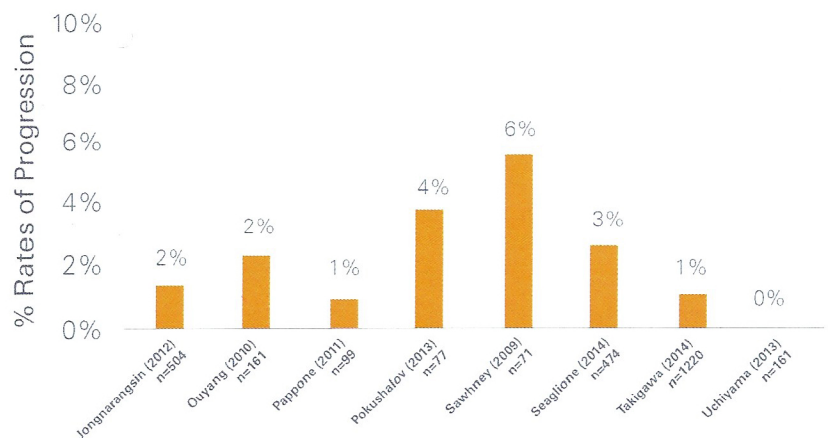
In registry study of 4535 AFib patients, **patients with the shortest DAT had 41% lower rates of heart failure hospitalization at one year** as compared to patients with the longest DAT.⁴

*Relative reduction from the comparison of 1152 patients with a DAT of 1-6 months versus 1201 patients with a DAT of >5 years at a mean follow-up for 3.2 years. Heart failure hospitalization defined as ICD-9 code 428 within patient EMR. Differences were significant where p-trend=0.009.

Early treatment of AFib with catheter ablation substantially reduces the rate of AFib progression from paroxysmal to persistent, a more complex and difficult-to-treat state of AFib.²

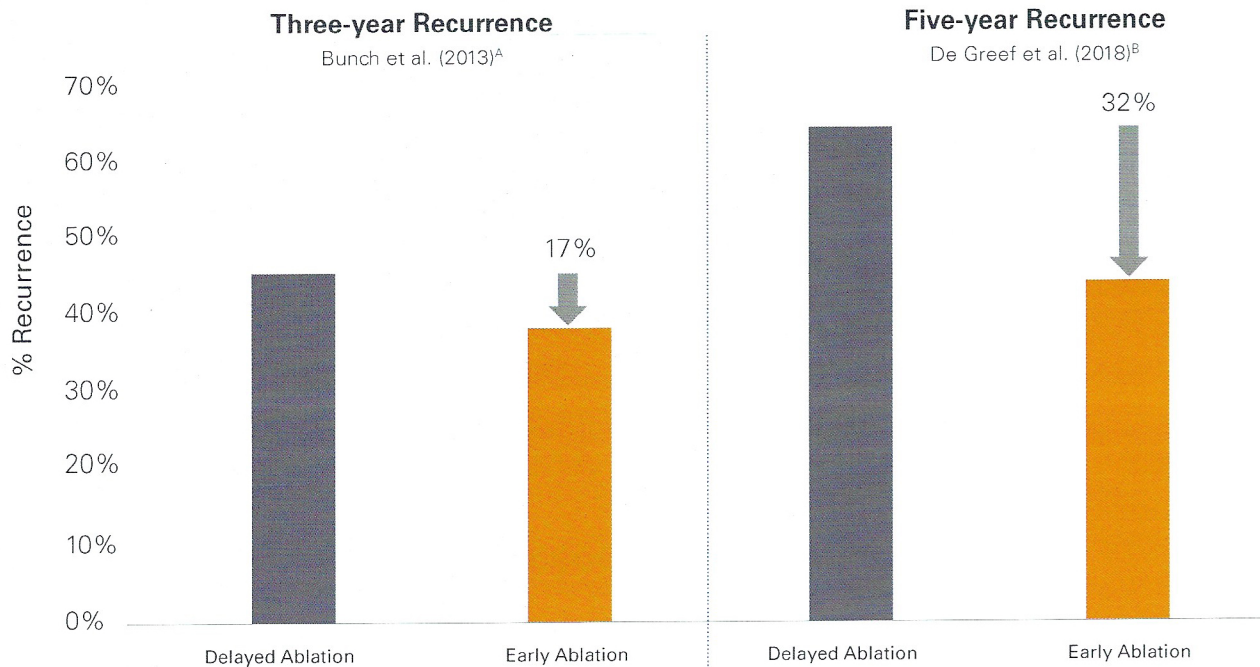
A systematic review and meta-analysis of eight studies found that **paroxysmal AFib patients treated with catheter ablation had low rates of progression to persistent AFib.** In contrast, **up to 77.2% of medically-managed paroxysmal AFib patients will progress to persistent AFib.**²

*Time frames for progression ranged between 2 to 6 years within ablation studies and 1 and 14 years for medically managed studies.



Delaying catheter ablation of AFib after diagnosis results in faster disease progression, reducing the efficacy of subsequent catheter ablation procedures.^{4,5}

Patients with shorter DAT experience significantly lower rates of AF recurrence after catheter ablation.^{4,5}



^A Relative reduction from the comparison of 1152 patients with a DAT of 1-6 months versus 1201 patients with a DAT of >5 years at a mean follow-up for 3.2 years. Differences were significant where p=0.003

^B Relative reduction from the comparison of 244 patients with DAT of ≤ 11 months versus 250 patients with a DAT of ≥ 71 months at 5 year follow-up. Differences were significant where p<0.05

AFib patients who wait longer after diagnosis to receive catheter ablation ultimately have higher rates of mortality.^{4,5}



**UPTO 52%
LOWER RATES OF
MORTALITY**

52% fewer patients died within one year when catheter ablation was performed earlier after diagnosis compared to AFib patients with delayed catheter ablation.⁴

*Relative reduction from the comparison of 1152 patients with a DAT of 1-6 months versus 1201 patients with a DAT of >5 years at a mean follow-up for 3.2 years. Death defined through use of death certificates. Differences were significant where p-trend=0.001

1. Marrouche NF, Wilber D, Hindricks G, et al. Association of atrial tissue fibrosis identified by delayed enhancement MRI and atrial fibrillation catheter ablation: The DECAAF study. *JAMA - J Am Med Assoc.* 2014;311(5):498-506. doi:10.1001/jama.2014.3. 2. Proietti R, Hadjis A, Alturki A, et al. A systematic review on the progression of paroxysmal to persistent atrial fibrillation: Shedding new light on the effects of catheter ablation. *JACC Clin Electrophysiol.* 2015;1(3):105-115. doi:10.1016/j.jacep.2015.04.010. 3. Carrizo AG, Morillo CA. Catheter Ablation as First-Line Therapy for Atrial Fibrillation: Ready for Prime-Time? *Curr Cardiol Rep.* 2016;18(8). doi:10.1007/s11886-016-0747-4. 4. Bunch TJ, May HT, Bair TL, et al. Increasing time between first diagnosis of atrial fibrillation and catheter ablation adversely affects long-term outcomes. *Heart Rhythm.* 2013;10(9):1257-1262. doi:10.1016/j.hrthm.2013.05.013. 5. De Greef Y, Schwagten B, Chierchia GB, De Asmundis C, Stockman D, Buysschaert I. Diagnosis-to-ablation time as a predictor of success: Early choice for pulmonary vein isolation and long-term outcome in atrial fibrillation: Results from the Middelheim-PVI Registry. *Europace.* 2018;20(4):589-595. doi:10.1093/europace/euw426.

Important information: Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, warnings and precautions.
Caution: US law restricts this device to sale by or on the order of a physician.

THERMOCOOL® Navigation Catheters are indicated for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used with CARTO® Systems (excluding NAVISTAR® RMT THERMOCOOL® Catheter).

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