

**Actualités sur l'ablation de FA
dans les
recommandations ESC 2020**

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11 The ABC pathway in specific clinical settings/conditions/patient populations

A: Avoid Stroke

B: Better Symptom control

C: Cardiovascular risk factors

Les nouveautés ESC 2020/ 2016

Changes in the recommendations

Recommendations about integrated AF management

2020

Class^a

2016

Class^a

Recommendations for rhythm control/catheter ablation of AF

AF catheter ablation after drug therapy failure

AF catheter ablation for PVI is recommended for rhythm control after one failed or intolerant class I or III AAD, to improve symptoms of AF recurrences in patients with:

- Paroxysmal AF, or
- Persistent AF without major risk factors for AF recurrence, or
- Persistent AF with major risk factors for AF recurrence.

I

Catheter or surgical ablation should be considered in patients with symptomatic persistent or long-standing persistent AF refractory to AAD therapy to improve symptoms, considering patient choice, benefit and risk, supported by an AF Heart Team.

IIa

First-line therapy

AF catheter ablation:

- Is recommended to reverse LV dysfunction in AF patients when tachycardia-induced cardiomyopathy is highly probable, independent of their symptom status.

I

AF ablation should be considered in symptomatic patients with AF and HFrEF to improve symptoms and cardiac function when tachycardiomyopathy is suspected.

IIa

- Should be considered in selected AF patients with HFrEF to improve survival and reduce HF hospitalization.

IIa

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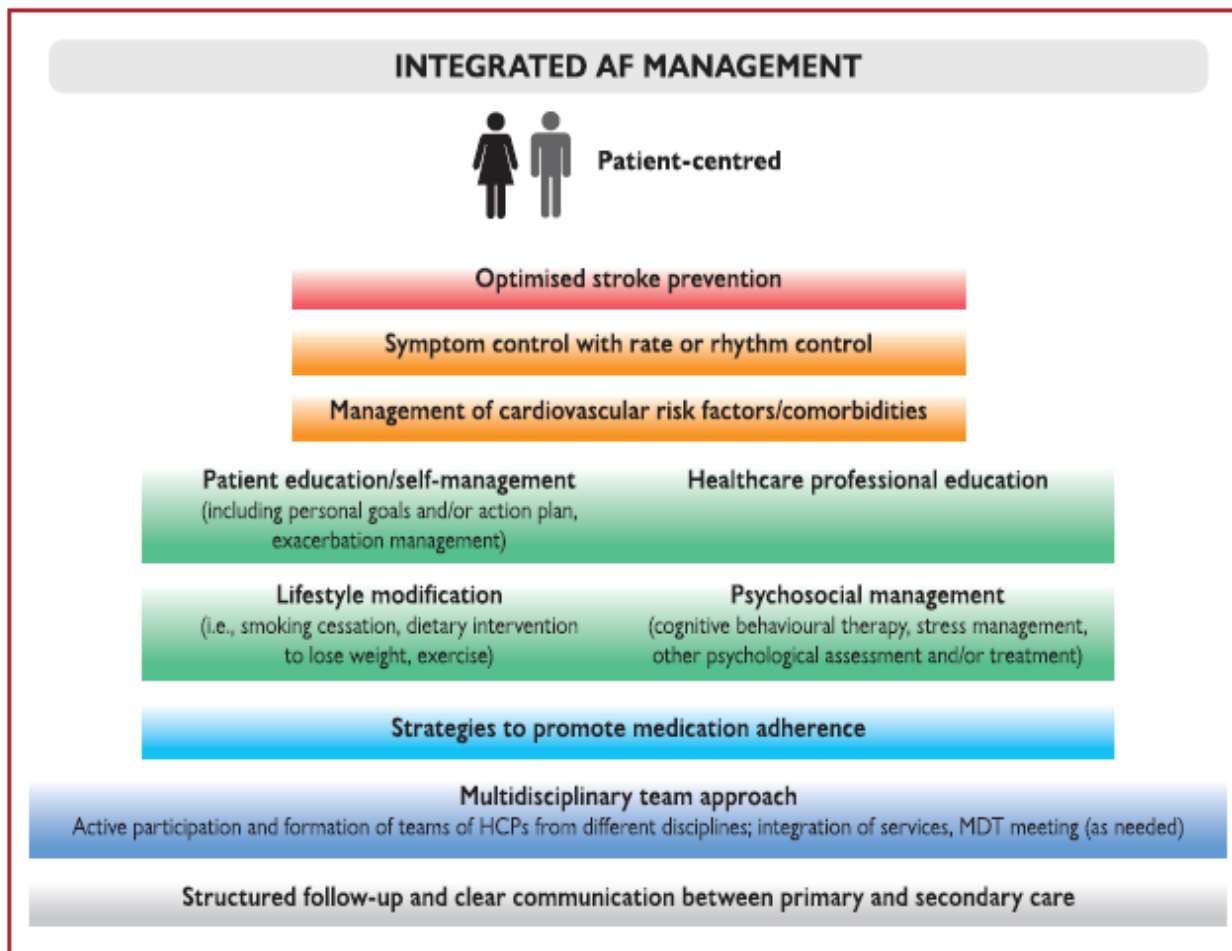
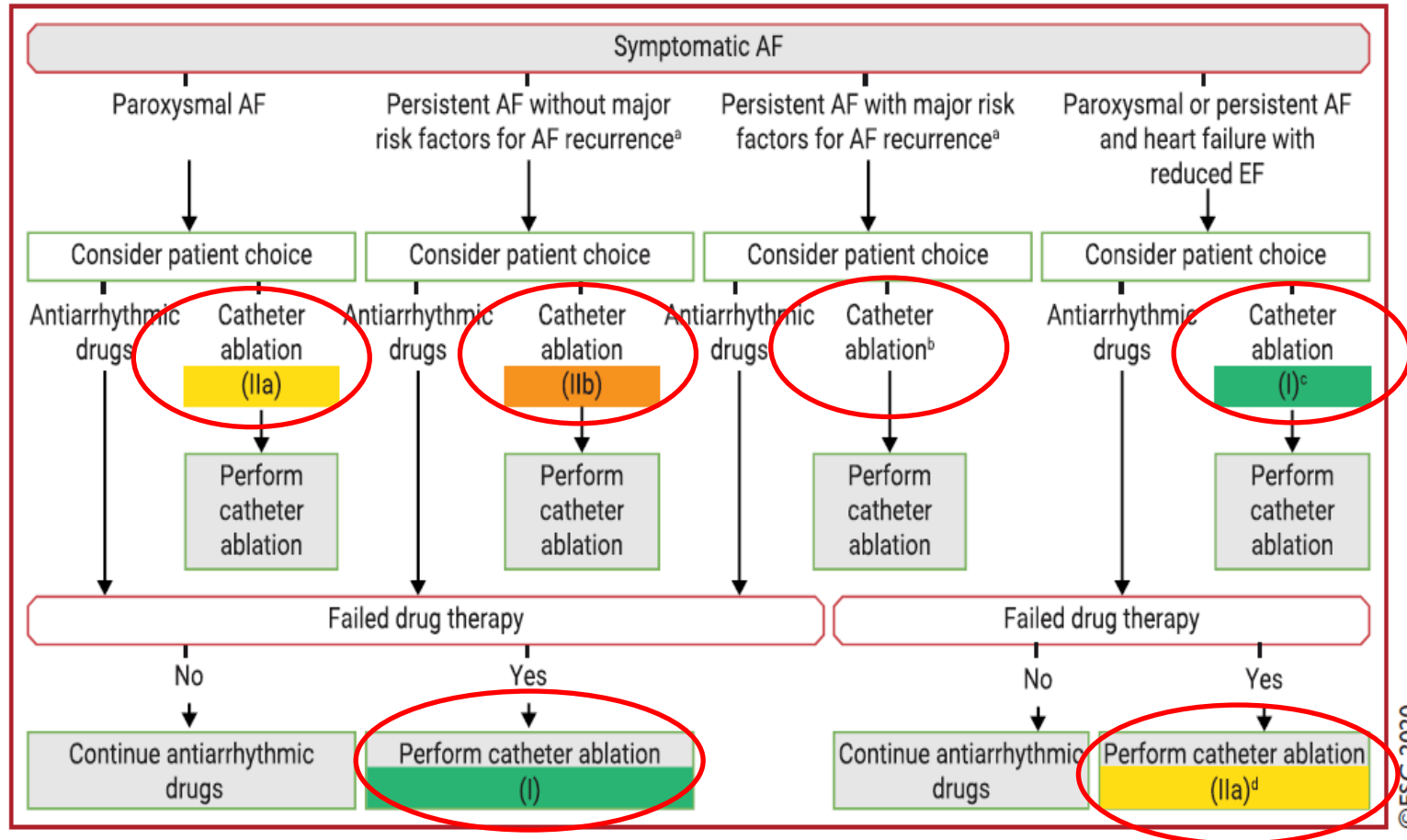


Figure 10 Components of integrated AF management. AF = atrial fibrillation; HCP = healthcare professional; MDT = multidisciplinary team.

INTERET DE LA PRISE EN CHARGE DES FDR CARDIOVASCULAIRES POST ABLATION FA++

INDICATION ABLATION DE LA FA



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Figure 17 Indications for catheter ablation of symptomatic AF. The arrows from AAD to ablation indicate failed drug therapy. AAD = antiarrhythmic drug; AF = atrial fibrillation; EF = ejection fraction; LA = left atrial. ^aSignificantly enlarged LA volume, advanced age, long AF duration, renal dysfunction, and other cardiovascular risk factors. ^bIn rare individual circumstances, catheter ablation may be carefully considered as first-line therapy. ^cRecommended to reverse LV dysfunction when tachycardiomyopathy is highly probably. ^dTo improve survival and reduce hospitalization.

SUIVI POST-ABLATION

Table 17 Key issues in follow-up after AF catheter ablation

Key issues
Recognition and management of complications <ul style="list-style-type: none">• Patients must be fully informed about the clinical signs and symptoms of rare but potentially dangerous ablation-related complications that may occur after hospital discharge (e.g. atrio-oesophageal fistula, pulmonary vein stenosis).
Follow-up monitoring: <p>Useful to assess procedural success and correlate symptom status with rhythm.^{795,796} Recurrences beyond the first month post-ablation are generally predictive of late recurrences,^{797,798} but recurrent symptoms may be due to ectopic beats or other non-sustained arrhythmia^{544,799,800}; conversely the presence of asymptomatic AF after ablation is well described.^{801–803}</p> <p>Monitoring may be performed with intermittent ECG, Holter, Patch recordings, external or implanted loop recorder, or smart phone monitor (although the latter has not been validated for such use). Patients should be first reviewed at a minimum of 3 months and annually thereafter.¹</p>
Management of antiarrhythmic medication and treatment of AF recurrences <ol style="list-style-type: none">a. Continuing AAD treatment for 6 weeks to 3 months may reduce early AF recurrences, rehospitalizations and cardioversions during this period.^{797,804} Clinical practice regarding routine AAD treatment after ablation varies and there is no convincing evidence that such treatment is routinely needed.b. Subsequently, AADs may be weaned, ceased, or continued according to symptoms and rhythm status. Recent findings suggest that in AAD-treated patients remaining free of AF at the end of the blanking period, AAD continuation beyond the blanking period reduces arrhythmia recurrences.⁸⁰⁵
Management of anticoagulation therapy <ol style="list-style-type: none">a. In general, OAC therapy is continued for 2 months following ablation in all patients.^{1,806} Beyond this time, a decision to continue OAC is determined primarily by the presence of CHA₂DS₂-VASc stroke risk factors rather than the rhythm status (section 10.2.2.6).

TECHNIQUE DE L'ABLATION

Techniques and technologies		
Complete electrical isolation of the pulmonary veins is recommended during all AF catheter-ablation procedures. ^{235–237,239,606,608–610,613,614,678,679,681,683,684,686,713,731,759,780}	I	A
If patient has history of CTI-dependent AFL or if typical AFL is induced at the time of AF ablation, delivery of a CTI lesion may be considered. ^{731–733,819–821}	IIb	B
Use of additional ablation lesions beyond PVI (low voltage areas, lines, fragmented activity, ectopic foci, rotors, and others) may be considered but is not well established. ^{677,680,708,711–730}	IIb	B
Lifestyle modification and other strategies to improve outcomes of ablation		
Weight loss is recommended in obese patients with AF, particularly those who are being evaluated to undergo AF ablation. ^{636,638,639,643,646,772,786–791}	I	B
Strict control of risk factors and avoidance of triggers are recommended as part of a rhythm control strategy. ^{636,637}	I	B

ABLATION DE LA FA HYBRIDE

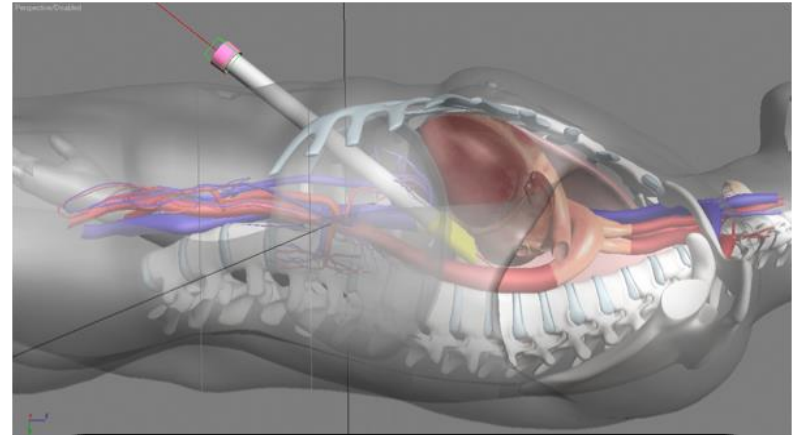
Recommendations for surgical ablation of AF

Recommendations	Class ^a	Level ^b
Concomitant AF ablation should be considered in patients undergoing cardiac surgery, balancing the benefits of freedom from atrial arrhythmias and the risk factors for recurrence (left atrial dilatation, years in AF, age, renal dysfunction, and other cardiovascular risk factors). ^{461,843,857–859}	IIa	A
Thoracoscopic—including hybrid surgical ablation—procedures should be considered in patients who have symptomatic paroxysmal or persistent AF refractory to AAD therapy and have failed percutaneous AF ablation, or with evident risk factors for catheter failure, to maintain long-term sinus rhythm. The decision must be supported by an experienced team of electrophysiologists and surgeons. ^{860,861}	IIa	B
Thoracoscopic—including hybrid surgical ablation—procedures may be considered in patients with persistent AF with risk factors for recurrence, who remain symptomatic during AF despite at least one failed AAD and who prefer further rhythm control therapy.	IIb	C

AAD = antiarrhythmic drug; AF = atrial fibrillation.

^aClass of recommendation.

^bLevel of evidence.



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Courtesy from M LaMeir

Effect of Catheter Ablation With Vein of Marshall Ethanol Infusion vs Catheter Ablation Alone on Persistent Atrial Fibrillation The VENUS Randomized Clinical Trial

Miguel Valderrábano, MD; Leif E. Peterson, PhD; Vijay Swarup, MD; Paul A. Schurmann, MD; Akash Makkar, MD; Rahul N. Doshi, MD; David DeLurgio, MD; Charles A. Athill, MD; Kenneth A. Ellenbogen, MD; Andrea Natale, MD; Jayanthi Koneru, MD; Amish S. Dave, MD, PhD; Irakli Giorgberidze, MD; Hamid Afshar, MD; Michelle L. Guthrie, RN; Raquel Bunge, RN; Carlos A. Morillo, MD; Neal S. Kleiman, MD

Figure 1. Clinical Trial Conduct

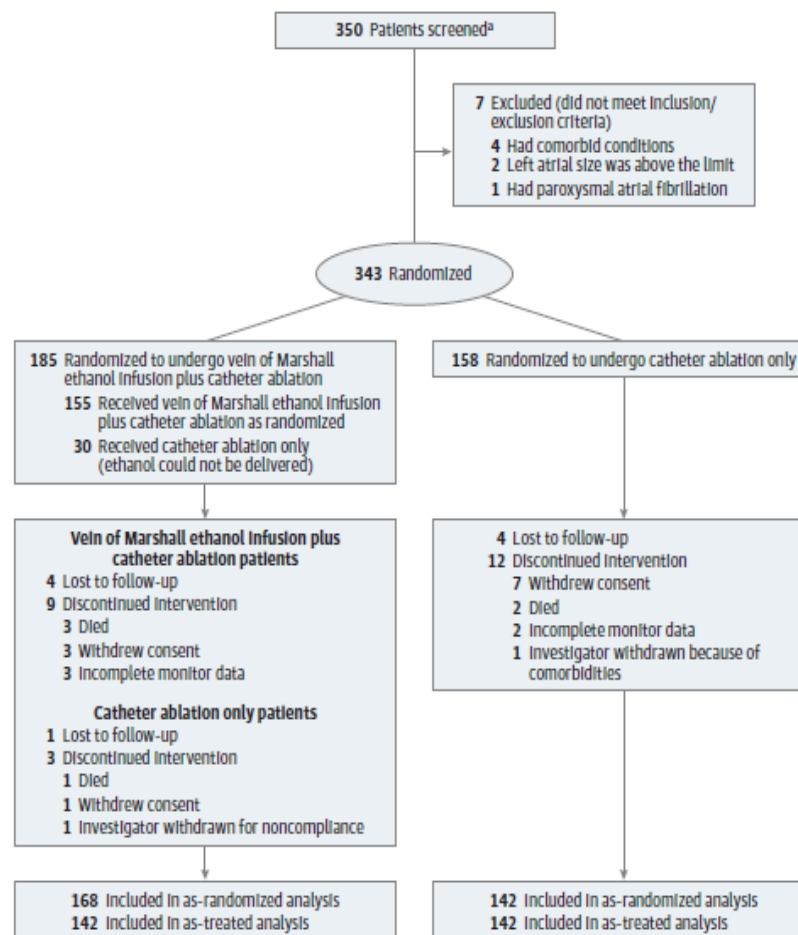
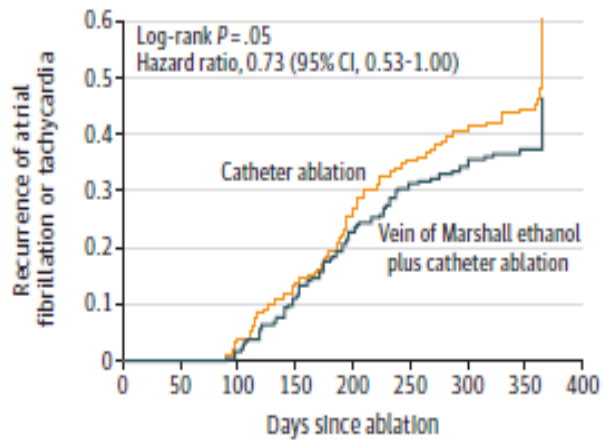


Table 1. Patient Demographic Characteristics

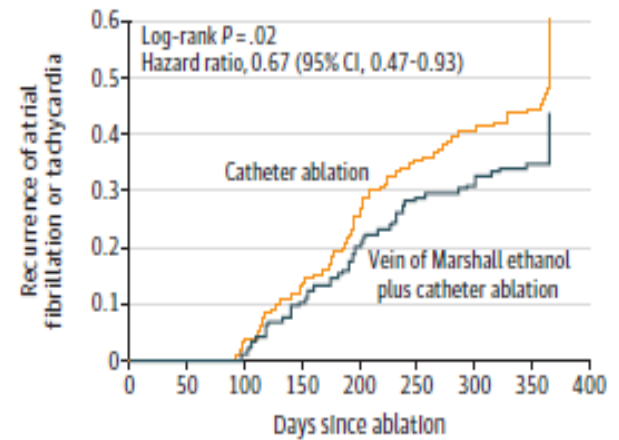
	No. (%)	
	Vein of Marshall-catheter ablation (n = 185)	Catheter ablation (n = 158)
Demographics		
Age, mean (SD), y	66.6 (9.6)	66.4 (9.9)
Sex, No. (%)		
Male	137 (74)	124 (78)
Female	48 (26)	34 (22)
Race and ethnicity		
White	169 (91)	150 (95)
Black	5 (3)	2 (1)
Hispanic	3 (2)	1 (1)
Asian	1 (1)	2 (1)
Not stated	7 (4)	3 (2)
Medical history and risk factors		
Hypertension	144 (77)	104 (66)
Diabetes	52 (28)	31 (20)
Coronary disease	52 (28)	41 (26)
Stroke-TIA	19 (10)	19 (12)
Heart failure	48 (26)	42 (27)
Body mass index ^a	31.2 (6.6)	31.9 (6.5)
CHA ₂ DS ₂ -VASC score ^b	2.9 (1.6)	2.6 (1.6)
Cardiac parameters		
Ejection fraction, %	52.1 (10.1)	53.4 (9.4)
Left atrial diameter, mm	44.8.1 (7.9)	47.0 (7.5)
Left atrial volume, mL	110.9 (46.8)	113.9 (46.3)
Time from first AF diagnosis		
<6 mo	15 (8)	10 (6)
6 mo to 2 y	76 (41)	65 (41)
>2 y	94 (51)	83 (52)
Longstanding persistent AF, No. (%) ^c	99 (54)	82 (52)

A Atrial fibrillation or tachycardia occurrence after single procedure in as-randomized analysis



No. at risk	0	50	100	150	200	250	300	350	400
Vein of Marshall ethanol plus catheter ablation	185	180	174	153	129	116	108	89	68
Catheter ablation	158	157	148	132	110	95	86	69	54

B Atrial fibrillation or tachycardia occurrence after single procedure in as-treated analysis



No. at risk	0	50	100	150	200	250	300	350	400
Vein of Marshall ethanol plus catheter ablation	155	151	145	129	111	100	95	77	58
Catheter ablation	158	157	148	132	110	95	86	69	54

-ETUDE DANS 11 CENTRES US

-DANS 16% DES CAS L'ALCOOLISATION N'A PAS PU ETRE EFFECTUEE

-Critère primaire de jugement : : récurrence de FA/ flutter d'au moins 30 secondes après 3 mois après l'ablation = critère classique avec 1 mois d'ECG continu à 6 et 12 mois.

-TAUX DE SUCCES A 1 AN 38% PVI vs 51% dans PVI+LOM

MERCI DE VOTRE ATTENTION!!