Les recommandations ESC 2020 sur la prise en charge de la fibrillation atriale

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CHU Grenoble-Alpes
2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association of Cardio-Thoracic Surgery (EACTS)

The Task Force for the diagnosis and management of atrial fibrillation of the European Society of Cardiology (ESC)

Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC

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LIFETIME RISK for AF
1 in 3 individuals

of European ancestry
at index age of 55 years
37.0% (34.3% to 39.6%)

Lifetime risk of AF increases with increasing risk factor burden

Cumulative risk of atrial fibrillation (%)

Age (years)

Risk Profile
- Optimal: 23.4% (12.8% to 34.5%)
- Borderline: 33.4% (27.9% to 38.9%)
- Elevated: 38.4% (35.5% to 41.4%)

AF ESC Guidelines, Eur Heart J 2020
### Clinical Presentation

<table>
<thead>
<tr>
<th>AF-Related Outcomes</th>
<th>Frequency in AF</th>
<th>Mechanisms</th>
</tr>
</thead>
</table>
| Death              | 1.5 - 1.5 fold increase | Excess mortality related to:  
- HF comorbidities  
- Stroke          |
| Stroke             | 20-30% of all ischaemic strokes, 10% of cryptogenic strokes |  
- Cardioembolic, or  
- Related to comorbid vascular atheroma |

### Table 6  EHRA symptom scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Symptoms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>AF does not cause any symptoms</td>
</tr>
<tr>
<td>2a</td>
<td>Mild</td>
<td>Normal daily activity not affected by symptoms related to AF</td>
</tr>
<tr>
<td>2b</td>
<td>Moderate</td>
<td>Normal daily activity not affected by symptoms related to AF, but patient troubled by symptoms</td>
</tr>
<tr>
<td>3</td>
<td>Severe</td>
<td>Normal daily activity affected by symptoms related to AF</td>
</tr>
<tr>
<td>4</td>
<td>Disabling</td>
<td>Normal daily activity discontinued</td>
</tr>
</tbody>
</table>

- **Haemodynamically stable**
- **Impaired quality of life**: >60% of patients
- **Hospitalizations**: 10-40% annual hospitalization rate
- **Symptomatic**: Palpitations, dyspnoea, fatigue
- **Asymptomatic or Silent (!)**: Mortality increase related to:
  - HF comorbidities
  - Stroke

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FA : CC et ABC

CC

Confirmir la FA
ECG de surface (12 D ou rythme) montrant un aspect de FA ≥ 30s

Caractériser la FA : 4S
- Stroke : risque AVCi, score CHA2DS2-VASc
- Sévérité symptômes, score EHRA
- Sévérité charge en FA, durée, persistance
- Substrat, âge, comorbidités, diastole DAO, fibrose

ABC

Traitir la FA : ABC

A
Anticoagulation prévention AVCi
1. Identifier patients à bas risque CHA2DS2-VASc 0 (h), 1 (f)
2. Prévention du risque si CHA2DS2-VASc ≥ 1 (h), 2 (f)
Evaluer risque hémorragique et ses facteurs de risque modifiables
3. Anticoagulant (AOD ou AVK avec TTR >70%)

B
Bon contrôle des symptômes
Evaluation des symptômes, QdV et avis du patient
Optimisation du contrôle de la FC
Envisager un contrôle du rythme (CEE, AA, ablation)

C
Comorbidités et risque Cardiovasculaire
Comorbidités et prise en charge des facteurs de risque Cardiovasculaires
Mode de vie (réduction de l’obésité, exercice physique, réduction de l’alcool, etc.)

AF ESC Guidelines, Eur Heart J 2020
Confirm AF

3.2 Diagnostic criteria for atrial fibrillation

The diagnosis of AF requires rhythm documentation with an electrocardiogram (ECG) tracing showing AF. By convention, an episode lasting at least 30 s is diagnostic for clinical AF.  

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECG documentation is required to establish the diagnosis of AF.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>- A standard 12-lead ECG recording or a single-lead ECG tracing of ≥30 s showing heart rhythm with no discernible repeating P waves and irregular RR intervals (when atrioventricular conduction is not impaired) is diagnostic of clinical AF.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Confirm AF

No symptoms attributable to AF and NOT previously diagnosed with clinical AF

Physician-confirmed:
- CI ED-recorded electrograms with AHRE
- ICM-recorded AF

ECG showing AF (physician-confirmed)
- Entire conventional 12-lead ECG, or
- An ECG strip with ≥ 30 sec of AF (including wearable-recorded ECGs)

Subclinical AF
- AF symptoms present or absent

Clinical AF
- Go to section 16
- Manage AF

AF ESC Guidelines, Eur Heart J 2020
Figure 7 Potential benefits from and risks of screening for AF. AF = atrial fibrillation; ECG = electrocardiogram; OAC = oral anticoagulant; SE = systemic embolism.
AF ESC Guidelines, Eur Heart J 2020
Fréquence cardiaque supérieure à 120 — ❤️
Moyenne de 147 BPM

Cet ECG n’a pas été utilisé pour rechercher une FA car votre fréquence cardiaque était supérieure à 120 BPM.

Si vous obtenez ce résultat à plusieurs reprises ou que vous ne vous sentez pas bien, consultez votre médecin.
Denis
Date de naissance : 27 nov. 1955 (63 ans)

Fibrillation auriculaire — Moyenne de 106 BPM

Cet ECG présente des signes de FA.
Si ce résultat vous surprend, consultez votre médecin.
## Recommendations for screening to detect AF

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunistic screening for AF by pulse taking or ECG rhythm strip is recommended in patients ≥65 years of age.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>It is recommended to interrogate pacemakers and implantable cardioverter defibrillators on a regular basis for AHRE.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>When screening for AF it is recommended that:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● The individuals undergoing screening are informed about the significance and treatment implications of detecting AF.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● A structured referral platform is organized for screen-positive cases for further physician-led clinical evaluation to confirm the diagnosis of AF and provide optimal management of patients with confirmed AF.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Definite diagnosis of AF in screen-positive cases is established only after physician reviews the single-lead ECG recording of ≥30 s or 12-lead ECG and confirms that it shows AF.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systematic ECG screening should be considered to detect AF in individuals aged ≥75 years, or those at high risk of stroke.</td>
<td>IIa</td>
<td>B</td>
</tr>
</tbody>
</table>
Classification

• Les définitions de FA paroxystique, persistante, persistante de longue durée, ou permanente restent identiques.

• Il est recommandé de ne plus utiliser les terminologies "FA isolée", "FA valvulaire" ou "FA non valvulaire", ou encore "FA chronique".

<table>
<thead>
<tr>
<th>Terminology that should be abandoned</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lone AF</td>
<td>A historical descriptor. Increasing knowledge about the pathophysiology of AF shows that in every patient a cause is present. Hence, this term is potentially confusing and should be abandoned.</td>
</tr>
<tr>
<td>Valvular/non-valvular AF</td>
<td>Differentiates patients with moderate/severe mitral stenosis and those with mechanical prosthetic heart valve(s) from other patients with AF, but may be confusing and should not be used.</td>
</tr>
<tr>
<td>Chronic AF</td>
<td>Has variable definitions and should not be used to describe populations of AF patients.</td>
</tr>
</tbody>
</table>

AF = atrial fibrillation.
Caractériser la FA : les 4 S

**Recommendations for structured characterization of AF**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class*</th>
<th>Levelb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured characterization of AF, which includes clinical assessment of stroke risk, symptom status, burden of AF, and evaluation of substrate, should be considered in all AF patients, to streamline the assessment of AF patients at different healthcare levels, inform treatment decision-making, and facilitate optimal management of AF patients.</td>
<td>Ila</td>
<td>C</td>
</tr>
</tbody>
</table>

AF ESC Guidelines, Eur Heart J 2020
Left atrial remodelling associated with AF

**Anatomy**
- Dilatation and change in geometry

**Structure**
- Fibrosis

**Function**
- Altered electrophysiology, LA reservoir, conduit and booster pump function

**LA/LAA thrombus detection**

Value of LA imaging techniques in AF

- TEE and TOE
- Cardiac CT
- Cardiac MRI
- EP mapping

Advanced/Investigation imaging:
- Echocardiographic TDI and LA strain, etc.
- MRI delayed enhancement or T1 imaging
- CT imaging of substrate, etc.

Value of LA imaging techniques in AF

- LV size, geometry and function assessment
- Heart valves morphology and function
- Right-heart chambers and pericardium imaging
Treat AF: The ABC pathway

A
Anticoagulation/Avoid stroke
1. Identify low-risk patients
   CHA$_2$DS$_2$-VASc 0(m), 1(f)
2. Offer stroke prevention if
   CHA$_2$DS$_2$-VASc ≥1(m), 2(f)
   Assess bleeding risk, address modifiable bleeding risk factors
3. Choose OAC (NOAC or VKA with well-managed TTR)

B
Better symptom control
Assess symptoms, QoL and patient’s preferences
Optimize rate control
Consider a rhythm control strategy (CV, AADs, ablation)

C
Comorbidities/Cardiovascular risk factor management
Comorbidities and cardiovascular risk factors
Lifestyle changes (obesity reduction, regular exercise, reduction of alcohol use, etc.)

AF ESC Guidelines, Eur Heart J 2020
A - Anticoagulation/Avoid stroke

AF patients with prosthetic mechanical heart valves or moderate-severe mitral stenosis?

No

Step 1 Identify low-risk patients

Low stroke risk?
(CHA₂DS₂-VASc score: 0 in males 1 in females)

No

Consider stroke prevention (ie. OAC) in all AF patients with CHA₂DS₂-VASc ≥1 (male) or ≥2 (female)
Address modifiable bleeding risk factors in all AF patients.
Calculate the HAS-BLED score.
If HAS-BLED ≥3, address the modifiable bleeding risk factors and 'flag up' patient for regular review and follow-up.
High bleeding risk scores should not be used as a reason to withhold OAC.

CHA₂DS₂-VASc

≥1 (male) or ≥2 (female)

OAC should be considered (Class IIa)

No antithrombotic treatment

Yes

VKA with high time in therapeutic range
(target INR range depends on type of valve lesion or prosthesis)

Yes

OAC is recommended (Class I)

Step 3 Begin NOAC (or VKA with high time in therapeutic range*)
NOACs generally recommended as first line therapy for OAC

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## Recommendations for the prevention of thromboembolic events in AF (1)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>For stroke prevention in AF patients who are eligible for OAC, NOACs are recommended in preference to VKAs (excluding patients with mechanical heart valves or moderate-to-severe mitral stenosis).</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>For stroke risk assessment, a risk-factor–based approach is recommended, using the CHA$_2$DS$_2$-VASc clinical stroke risk score to initially identify patients at ‘low stroke risk’ (CHA$_2$DS$_2$-VASc score = 0 in men, or 1 in women) who should not be offered antithrombotic therapy.</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>OAC is recommended for stroke prevention in AF patients with CHA$_2$DS$_2$-VASc score ≥2 in men or ≥3 in women.</td>
<td>I</td>
<td>A</td>
</tr>
</tbody>
</table>
Recommendations for the prevention of thromboembolic events in AF (2)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC should be considered for stroke prevention in AF patients with a ( \text{CHA}_2\text{DS}_2\text{-VASc} ) score of 1 in men or 2 in women. Treatment should be individualized based on net clinical benefit and consideration of patient values and preferences.</td>
<td>Ila</td>
<td>B</td>
</tr>
<tr>
<td>For bleeding risk assessment, a formal structured risk-score–based bleeding risk assessment is recommended to help identify non-modifiable and address modifiable bleeding risk factors in all AF patients, and to identify patients potentially at high risk of bleeding who should be scheduled for early and more frequent clinical review and follow-up.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>For a formal risk-score–based assessment of bleeding risk, the HAS-BLED score should be considered to help address modifiable bleeding risk factors, and to identify patients at high risk of bleeding (HAS-BLED score ≥3) for early and more frequent clinical review and follow-up.</td>
<td>Ila</td>
<td>B</td>
</tr>
</tbody>
</table>
### Recommendations for the prevention of thromboembolic events in AF (4)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>In patients on VKAs with low time in INR therapeutic range (e.g. TTR &lt;70%), recommended options are:</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>• Switching to a NOAC but ensuring good adherence and persistence with therapy; or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Efforts to improve TTR (e.g. education/counselling and more frequent INR checks).</td>
<td>IIa</td>
<td>B</td>
</tr>
<tr>
<td>Antiplatelet therapy alone (monotherapy or aspirin in combination with clopidogrel) is not recommended for stroke prevention in AF.</td>
<td>III</td>
<td>A</td>
</tr>
<tr>
<td>Estimated bleeding risk, in the absence of absolute contraindications to OAC, should not in itself guide treatment decisions to use OAC for stroke prevention.</td>
<td>III</td>
<td>A</td>
</tr>
<tr>
<td>Clinical pattern of AF (i.e. first detected, paroxysmal, persistent, long-standing persistent, permanent) should not condition the indication to thromboprophylaxis.</td>
<td>III</td>
<td>B</td>
</tr>
</tbody>
</table>

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2020 ESC Guidelines for the diagnosis and management of atrial fibrillation (European Heart Journal 2020-doi/10.1093/eurheartj/ehaa612)
Recommendations for the prevention of thromboembolic events in AF (5)

<table>
<thead>
<tr>
<th>Recommendations for occlusion or exclusion of the LAA</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAA occlusion may be considered for stroke prevention in patients with AF and contraindications for long-term anticoagulant treatment (e.g. intracranial bleeding without a reversible cause).</td>
<td>IIb</td>
<td>B</td>
</tr>
<tr>
<td>Surgical occlusion or exclusion of the LAA may be considered for stroke prevention in patients with AF undergoing cardiac surgery.</td>
<td>IIb</td>
<td>C</td>
</tr>
</tbody>
</table>
Subclinical AF and AHRE

THE RISK OF STROKE (re-assess regularly)

Low risk
CHA$_2$DS$_2$-VASc
0 (m) or 1 (f)

Single risk factor
CHA$_2$DS$_2$-VASc
1 (m) or 2 (f)

High risk
CHA$_2$DS$_2$-VASc
≥2 (m) or ≥3 (f)

- An "innocent bystander"
- Observe for:
  - Increase in AHREs/SCAF burden or clinical AF development

- Long AHREs/SCAF (≥ 24 h) especially if high burden
- Change in individual stroke risk

Clinical AF

Observe for:
- Increase in AHREs/SCAF burden or clinical AF development

Consideration for OAC use in selected patients at high/very high risk of stroke (where there are no doubts on AF diagnosis at device tracings analysis) when a positive net clinical benefit can be anticipated (shared decision-making)

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Treat AF: The ABC pathway

A
Anticoagulation/Avoid stroke

B
Better symptom control

C
Comorbidities/Cardiovascular risk factor management

1. Identify low-risk patients
   CHA₂DS₂-VASc 0(m), 1(f)
2. Offer stroke prevention if
   CHA₂DS₂-VASc ≥1(m), 2(f)
   Assess bleeding risk, address modifiable bleeding risk factors
3. Choose OAC (NOAC or VKA with well-managed TTR)

Assess symptoms, QoL and patient’s preferences
Optimize rate control
Consider a rhythm control strategy (CV, AADs, ablation)

Comorbidities and cardiovascular risk factors
Lifestyle changes (obesity reduction, regular exercise, reduction of alcohol use, etc.)

AF ESC Guidelines, Eur Heart J 2020
Figure 17 Indications for catheter ablation of symptomatic AF

- Paroxysmal AF: Consider patient choice, Antiarrhythmic drugs (Ila), Perform catheter ablation, Failed drug therapy: Continue antiarrhythmic drugs.
- Persistent AF without major risk factors for AF recurrence: Consider patient choice, Antiarrhythmic drugs (Iib), Perform catheter ablation, Failed drug therapy: Continue antiarrhythmic drugs.
- Persistent AF with major risk factors for AF recurrence: Consider patient choice, Antiarrhythmic drugs, Perform catheter ablation, Failed drug therapy: Continue antiarrhythmic drugs.
- Paroxysmal or persistent AF and heart failure with reduced EF: Consider patient choice, Antiarrhythmic drugs, Catheter ablation (I), Perform catheter ablation, Failed drug therapy: Perform catheter ablation (Ila).

Significantly enlarged LA volume, advanced age, long AF duration, renal dysfunction, and other cardiovascular risk factors. In rare individual circumstances, catheter ablation may be carefully considered as first-line therapy. Recommended to reverse LV dysfunction when tachycardiomypathy is highly probable. To improve survival and reduce hospitalization.

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2020 ESC Guidelines for the diagnosis and management of atrial fibrillation (European Heart Journal 2020-doi/10.1093/eurheartj/ehaa612)
### Recommendations for rhythm control/catheter ablation of AF (2)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AF catheter ablation after failure of drug therapy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>• Paroxysmal AF, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Persistent AF without major risk factors for AF recurrence, or</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>• Persistent AF with major risk factors for AF recurrence</td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>AF catheter ablation for PVI should be considered for rhythm control after one failed or intolerant to beta-blocker treatment to improve symptoms of AF recurrences in patients with paroxysmal and persistent AF.</td>
<td>IIa</td>
<td>B</td>
</tr>
</tbody>
</table>
### Recommendations for rhythm control/catheter ablation of AF (3)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-line therapy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF catheter ablation for PVI should/may be considered as first-line rhythm control therapy to improve symptoms in selected patients with symptomatic:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Paroxysmal AF episodes, or</td>
<td>IIa</td>
<td>B</td>
</tr>
<tr>
<td>• Persistent AF without major risk factors for AF recurrence.</td>
<td>IIb</td>
<td>C</td>
</tr>
<tr>
<td>as an alternative to AAD class I or III, considering patient choice, benefit, and risk.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommendations for rhythm control/catheter ablation of AF (4)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-line therapy (continued)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF catheter ablation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is recommended to reverse LV dysfunction in AF patients when tachycardia-induced cardiomyopathy is highly probable, independent of their symptom status.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>• Should be considered in selected AF patients with HF with reduced LVEF to improve survival and reduce HF hospitalization.</td>
<td>IIa</td>
<td>B</td>
</tr>
<tr>
<td>AF catheter ablation for PVI should be considered as a strategy to avoid pacemaker implantation in patients with AF-related bradycardia or symptomatic pre-automaticity pause after AF conversion considering the clinical situation.</td>
<td>IIa</td>
<td>C</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Class</td>
<td>Level</td>
</tr>
<tr>
<td>------------------</td>
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<td>-------</td>
</tr>
<tr>
<td>Techniques and technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete electrical isolation of the pulmonary veins is recommended during all AF catheter- ablation procedures.</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>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.</td>
<td>IIb</td>
<td>B</td>
</tr>
<tr>
<td>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.</td>
<td>IIb</td>
<td>B</td>
</tr>
</tbody>
</table>
### Recommendations for rhythm control/catheter ablation of AF (6)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lifestyle modification and other strategies to improve outcomes of ablation</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight loss is recommended in obese patients with AF, particularly those who are evaluated to undergo AF ablation.</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>Strict control of risk factors and avoidance of triggers are recommended as part of a rhythm control strategy.</td>
<td>I</td>
<td>B</td>
</tr>
</tbody>
</table>
Several AF risk factors may contribute to the development of LA substrates and thus affect the outcome of AF catheter ablation, predisposing to a higher recurrence rate. Aggressive control of modifiable risk factors may reduce recurrence rate.
### Recommendations for stroke risk management peri catheter ablation (1)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>In AF patients with stroke risk factors not taking OAC before ablation, it is</td>
<td>I</td>
<td>C</td>
</tr>
<tr>
<td>recommended that preprocedural management of stroke risk includes initiation of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>anticoagulation and:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Preferably, therapeutic OAC for at least 3 weeks before ablation, or</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>• Alternatively, the use of TOE to exclude LA thrombus before ablation.</td>
<td></td>
<td></td>
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<tr>
<td>For patients undergoing AF catheter ablation who have been therapeutically</td>
<td></td>
<td></td>
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<tr>
<td>anticoagulated with warfarin, dabigatran, rivaroxaban, apixaban, or edoxaban,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance of the ablation procedure without OAC interruption is recommended.</td>
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<td></td>
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</tbody>
</table>
**Recommendations for stroke risk management peri catheter ablation (2)**

After AF catheter ablation, it is recommended that:
- Systemic anticoagulation with warfarin or a NOAC is continued for at least 2 months post ablation, and
- Long-term continuation of systemic anticoagulation beyond 2 months post ablation is based on the patient’s stroke risk profile and not on the apparent success or failure of the ablation procedure.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic anticoagulation with warfarin or a NOAC is continued for at least 2 months post ablation, and</td>
<td>I</td>
<td>C</td>
</tr>
<tr>
<td>Long-term continuation of systemic anticoagulation beyond 2 months post ablation is based on the patient’s stroke risk profile and not on the apparent success or failure of the ablation procedure.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Treat AF: The ABC pathway

A  Anticoagulation/Avoid stroke
1. Identify low-risk patients
   CHA₂DS₂-VASc 0(m), 1(f)
2. Offer stroke prevention if
   CHA₂DS₂-VASc ≥1(m), 2(f)
   Assess bleeding risk, address
   modifiable bleeding risk factors
3. Choose OAC (NOAC or VKA
   with well-managed TTR)

B  Better symptom control
Assess symptoms, QoL and patient’s
preferences
Optimize rate control
Consider a rhythm control strategy
(CV, AADs, ablation)

C  Comorbidities/Cardiovascular risk factor management
Comorbidities and cardiovascular risk factors
Lifestyle changes (obesity reduction,
regular exercise, reduction of alcohol use,
etc.)

AF ESC Guidelines, Eur Heart J 2020
Components of risk factor modification in ARREST-AF and LEGACY studies

Impact of Body Mass Index on the Outcomes of Catheter Ablation of Atrial Fibrillation: A European Observational Multicenter Study

Rui Providência, MD, PhD; Pedro Adragão, MD, PhD; Carlo de Asmundis, MD, PhD; Julian Chun, MD; Gianbattista Chierchia, MD, PhD; Pascal Defaye, MD; Frédéric Anselme, MD, PhD; Antonio Cresta, MD; Pier D. Lambiase, PhD; Boris Schmidt, MD; Shaojie Chen, MD; Diogo Cavaco, MD; Ross J. Hunter, MD; João Carmo, MD; Stephane Combes, MD; Shohreh Honarbakhsh, BSc; Nicolas Combes, MD; Maria João Sousa, MD; Zeynab Jebberi, MD; Jean-Paul Albenque, MD; Serge Boveda, MD, PhD

Freedom from atrial arrhythmia relapse stratified by BMI class for all patients

<table>
<thead>
<tr>
<th>BMI Class</th>
<th>0M</th>
<th>12M</th>
<th>24M</th>
<th>36M</th>
<th>48M</th>
<th>60M</th>
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</thead>
<tbody>
<tr>
<td>&lt;25Kg/m²</td>
<td>711</td>
<td>437</td>
<td>216</td>
<td>91</td>
<td>52</td>
<td>16</td>
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<tr>
<td>25-30Kg/m²</td>
<td>1,092</td>
<td>606</td>
<td>289</td>
<td>151</td>
<td>82</td>
<td>30</td>
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<tr>
<td>30-35Kg/m²</td>
<td>508</td>
<td>268</td>
<td>113</td>
<td>48</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>≥35Kg/m²</td>
<td>186</td>
<td>79</td>
<td>24</td>
<td>8</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

J AHA 2020
CC

Confirmer la FA
ECG de surface (12 D ou rythme) montrant un aspect de FA ≥ 30s

Caractériser la FA : 4S
- Stroke : risque AVCi
- Sévérité symptômes
- Sévérité charge en FA
- Substrat
  - âge, comorbidités, clots, fibrose

ABC

Traitier la FA : ABC

A
Anticoagulation prévention AVCi
1. Identifier patients à bas risque
   CHA2DS2-VASc 0 (h.), 1 (f)
2. Prévention du risque si
   CHA2DS2-VASc ≥ 1 (h.), 2 (f)
3. Anticoagulant (AOO ou AVK
   avec TTR >70%)

B
Bon contrôle des symptômes
- Évaluation des symptômes, QdV et avis du patient
- Optimisation du contrôle de la FC
- Envisager un contrôle du rythme
  (CEE, AA, ablation)

C
Comorbidités et risque Cardiovasculaire
- Comorbidités et prise en charge des facteurs de risque Cardiovasculaires
- Mode de vie
  (réduction de l’obésité, exercice physique, réduction de l’alcool, etc.)