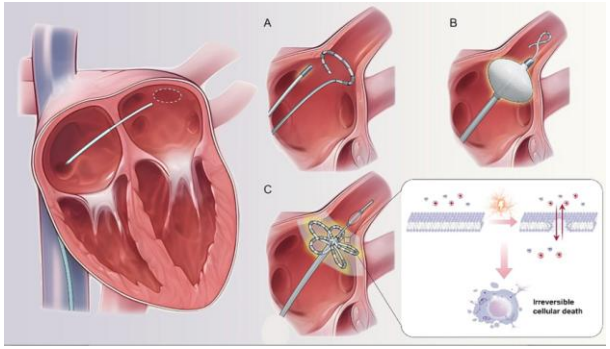
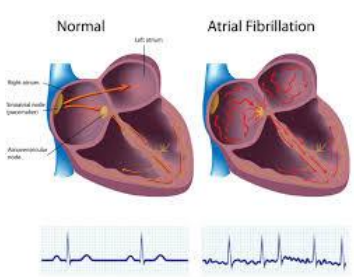




PEC thérapeutique de la FA

Particularités chez le sportif

Dr Didier IRLES - Annecy

ESC European Society of Cardiology

European Heart Journal (2024) **45**, 3314–3414
https://doi.org/10.1093/eurheartj/ehae176

ESC GUIDELINES

2024 ESC Guidelines for the management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS)

HeartRhythm

The Official Journal of the Heart Rhythm Society, The Cardiac Electrophysiology Society, and The Pediatric & Congenital Electrophysiology Society

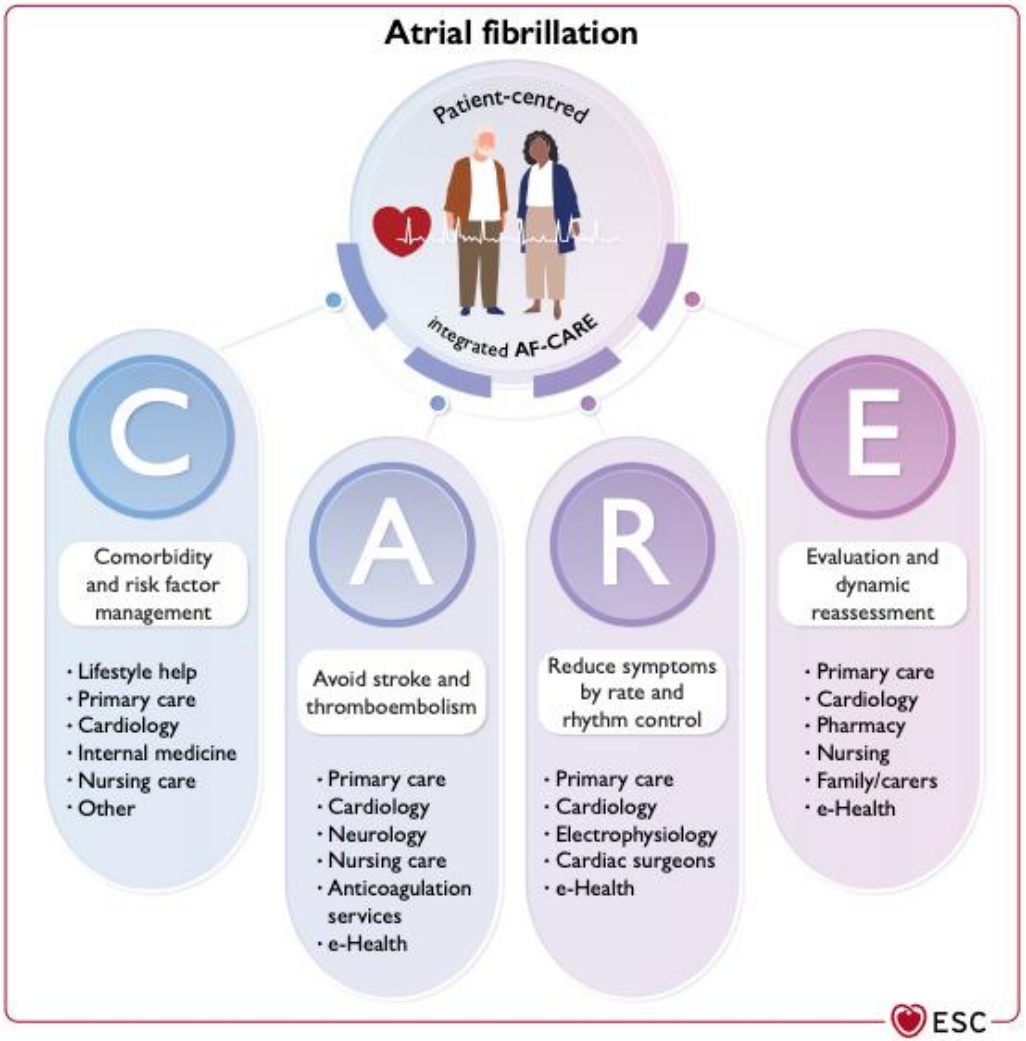
Heart Rhythm Society SM

Check for updates

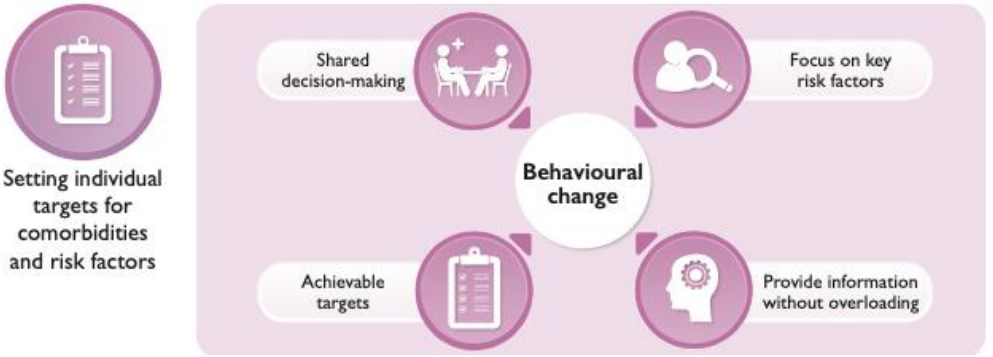
HRS Consensus Statement

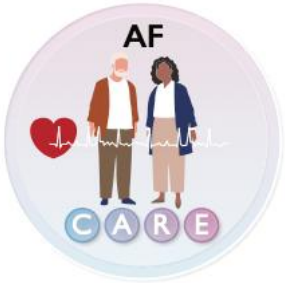
2024 HRS expert consensus statement on arrhythmias in the athlete: Evaluation, treatment, and return to play

PEC thérapeutique – ESC 2024



Traitement des co-morbidités





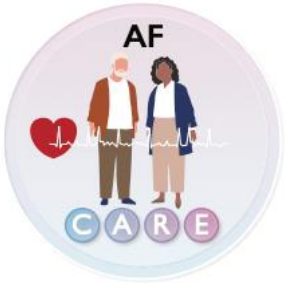
C — Comorbidity and risk factor management

Hypertension	Heart failure	Overweight or obese	Obstructive sleep apnoea	Alcohol
Blood pressure lowering treatment (Class I)	Diuretics for congestion (Class I)	Weight loss (target 10%)[a] (Class I)	Management of OSA[a] (Class IIb)	Reduce to ≤3 drinks per week (Class I)
Diabetes mellitus	Appropriate HFrEF medical therapy (Class I)	Bariatric surgery if rhythm control[a] (Class IIb)	**Exercise capacity**	**Other risk factors/ comorbidities**
Effective glycaemic control[a] (Class I)	SGLT2 inhibitors (Class I)		Tailored exercise programme (Class I)	Identify and manage aggressively[a] (Class I)

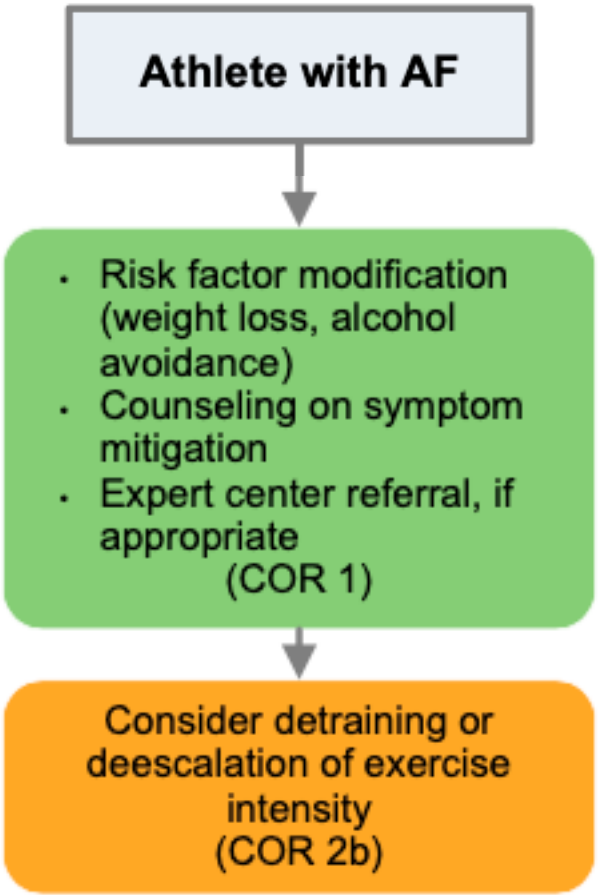
Traitement des co-morbidités

Key targets

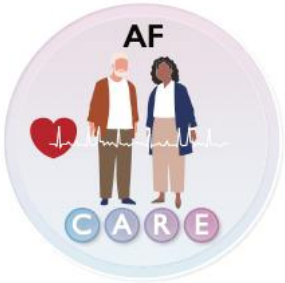
Integrated management	Identify and actively manage all risk factors and comorbidities (Class I)
Hypertension	Blood pressure treatment with target 120–129 mmHg / 70–79 mmHg in most adults (or as low as reasonably achievable) (Class I)
Heart failure	Optimize with diuretics to alleviate congestion appropriate, medical therapy for reduced LVEF, and SGLT2 inhibitors for all LVEF (Class I)
Diabetes	Effective glycaemic control with diet/medication(s) (Class I)
Obesity	Weight loss programme if overweight /obese, with 10% or more weight loss (Class I)
Sleep apnoea	Management of obstructive sleep apnoea to minimize apnoeic episodes (Class IIb)
Physical activity	Tailored exercise programme aiming for regular moderate/vigorous activity (Class I)
Alcohol intake	Reduce alcohol consumption to 3 or less standard drinks per week (Class I)



Chez l’athlète – HRS 2024



Anticoagulation curative



A — Avoid stroke and thromboembolism

Risk of thrombo-embolism	Use locally-validated risk score or CHA_2DS_2-VA	Choice of anticoagulant	Assess bleeding risk	Prevent bleeding
Start oral anticoagulation (Class I)	OAC if CHA_2DS_2-VA score = 2 or more (Class I)	Use DOAC, except mechanical valve or mitral stenosis (Class I)	Assess and manage all modifiable risk factors for bleeding (Class I)	Do not combine antiplatelets and OAC for stroke prevention (Class III)
Temporal pattern of AF not relevant (Class III)	OAC if CHA_2DS_2-VA score = 1 (Class IIa)	If VKA: Target INR 2.0–3.0; (Class I) >70% INR range; (Class IIa) or switch to DOAC (Class I)	Do not use risk scores to withhold anticoagulation (Class III)	Avoid antiplatelets beyond 12 months in OAC treated CCS/PVD (Class III)
Antiplatelet therapy not an alternative (Class III)				

Anticoagulation curative

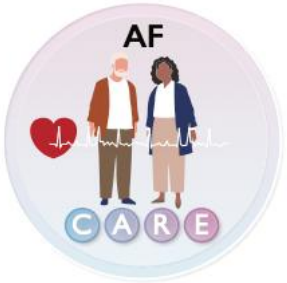


Table 11 **Recommended doses for direct oral anticoagulant therapy**

DOAC	Standard full dose	Criteria for dose reduction	Reduced dose only if criteria met
Apixaban	5 mg twice daily	Two out of three needed for dose reduction: (i) age ≥80 years (ii) body weight ≤60 kg (iii) serum creatinine ≥133 µmol/L.	2.5 mg twice daily
Dabigatran	150 mg twice daily	Dose reduction recommended if any apply: (i) age ≥80 years (ii) receiving concomitant verapamil. Dose reduction considered on an individual basis if any apply: (i) age 75–80 (ii) moderate renal impairment (creatinine clearance 30–50 mL/min) (iii) patients with gastritis, oesophagitis, or gastro-oesophageal reflux (iv) others at increased risk of bleeding.	110 mg twice daily
Rivaroxaban	20 mg once daily	Creatinine clearance 15–49 mL/min.	15 mg once daily

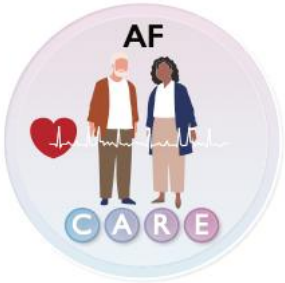
Chez l'athlète – HRS 2024

Athlete with AF

Recommendations for prevention of thromboembolism in athletes with atrial fibrillation

COR	LOE	Recommendations
1	B-NR	1. Use locally-validated risk score → OAC if CHA_2DS_2-VA score = 2 or more (Class I)
1	A	2. or CHA_2DS_2-VA
1	C-EO	3. In athletes with AF on anticoagulation who are participating in sports with a risk of trauma, a shared decision-making discussion about continued participation is recommended.
2b	B-NR	4. In athletes with AF, left atrial appendage occlusion (LAAO) may be considered based on anticoagulation indication and bleeding risk, taking into account patient preference to avoid long-term anticoagulation, in a shared decision-making context.[539,540]
2b	C-EO	5. In athletes meeting anticoagulation criteria who wish to temporarily participate in sports with a high risk of bleeding, temporarily withholding anticoagulation may be considered with a shared decision-making discussion.
3: Harm	B-R	9. In athletes with AF, catheter ablation to restore sinus rhythm with the sole intent of eliminating the need for long-term anticoagulation should not be performed.[578,579]

Stratégie Antiarythmique



R

Reduce symptoms by rate and rhythm control

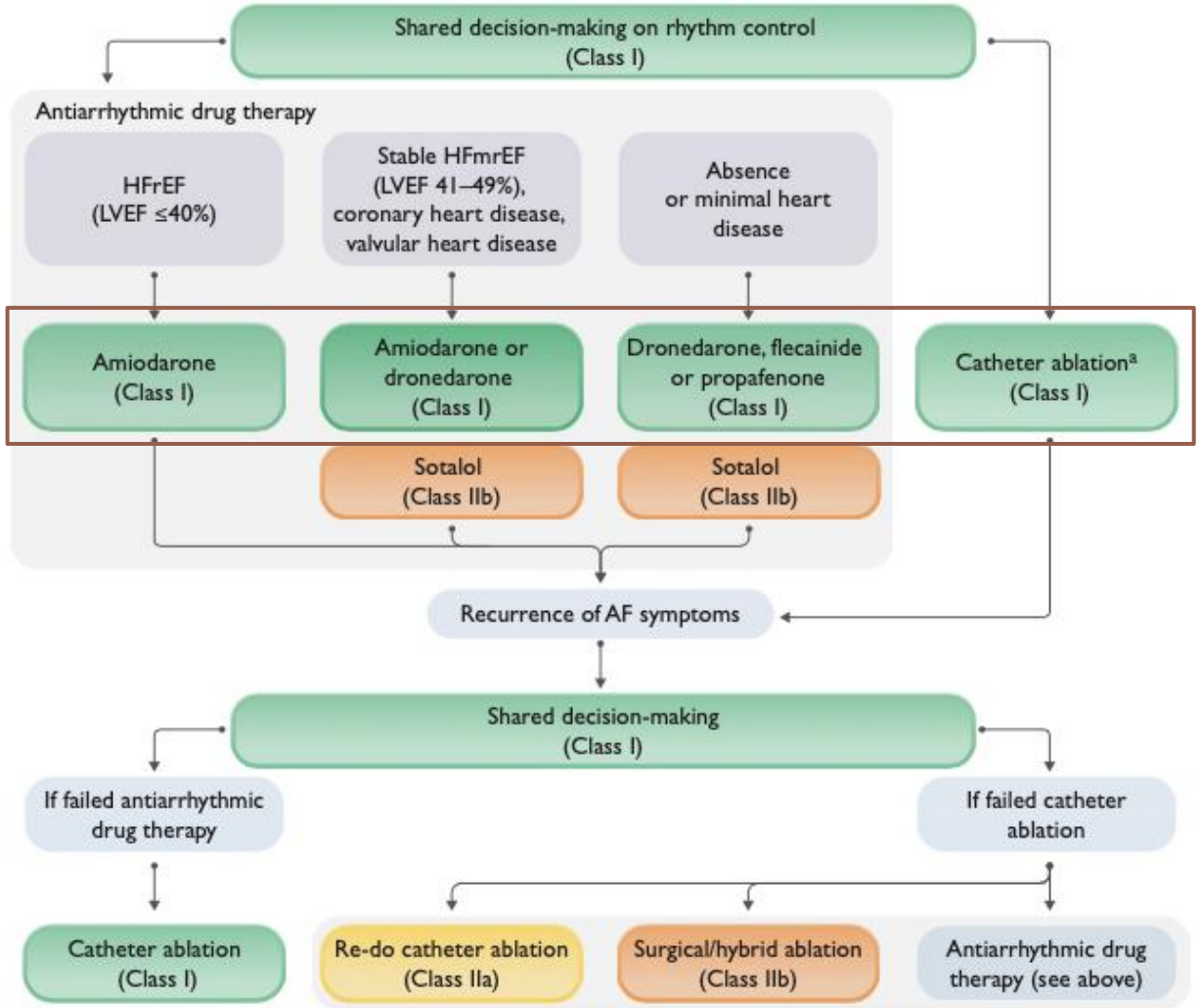
See patient pathways for:

First-diagnosed AF | Paroxysmal AF | Persistent AF | Permanent AF

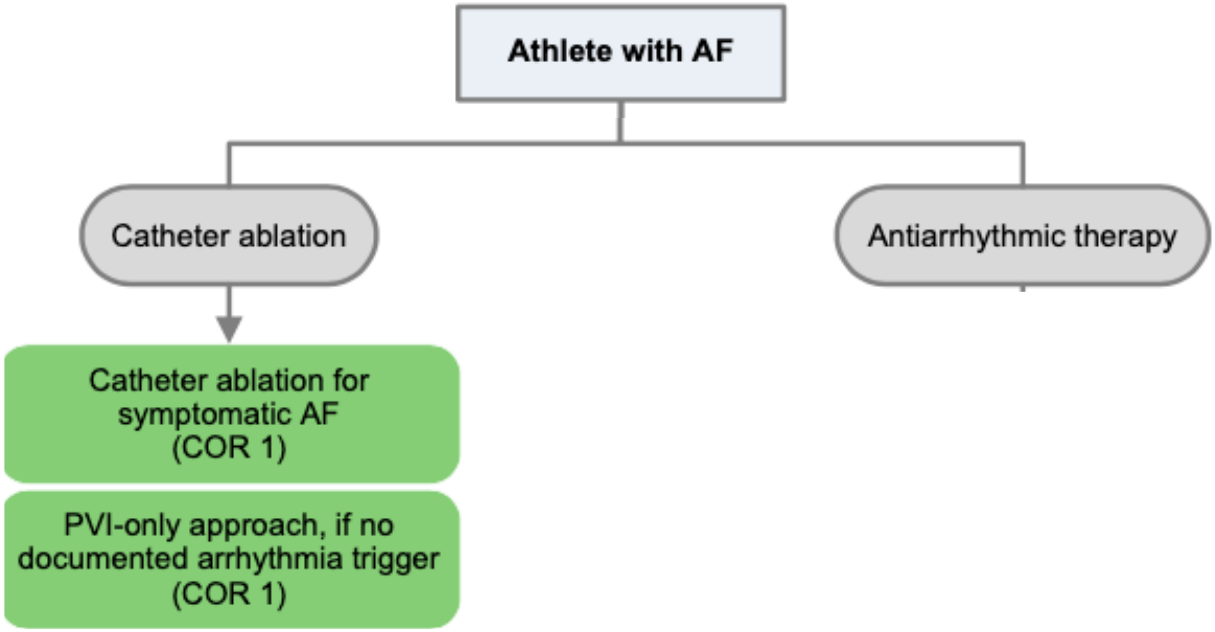
Consider:

Rate control drugs | Cardioversion | Antiarrhythmic drugs | Catheter ablation | Endoscopic/hybrid ablation | Surgical ablation | Ablate and pace

FA Paroxystique



Chez l'athlète – HRS 2024



Isolation des veines pulmonaires

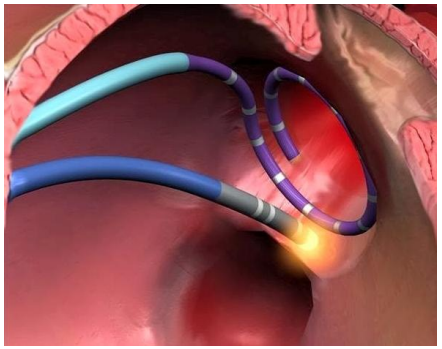
PRINCIPE
DE L'ABLATION

Isolation des veines pulmonaires

- Risques communs
  - Point de ponction : échoguidé
  - Risque thrombo-embolique (0,5-1%)
  - Risque hémorragique : tamponnade (1%)

Isolation des veines pulmonaires

- Spécificités



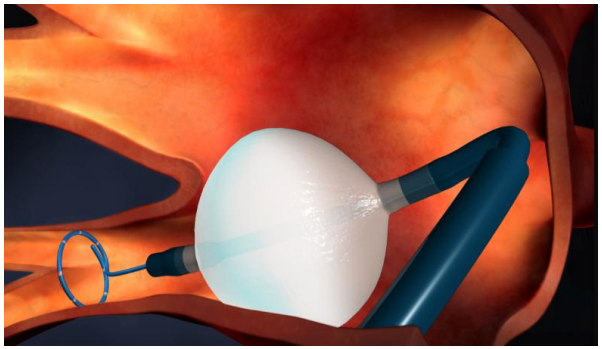
AG

Double TS

« Couteau Suisse »

Cartographie

Oesophage

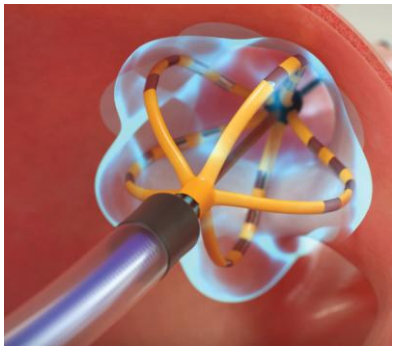


Possible sous AL

Simple TS

Veines

Phrénique

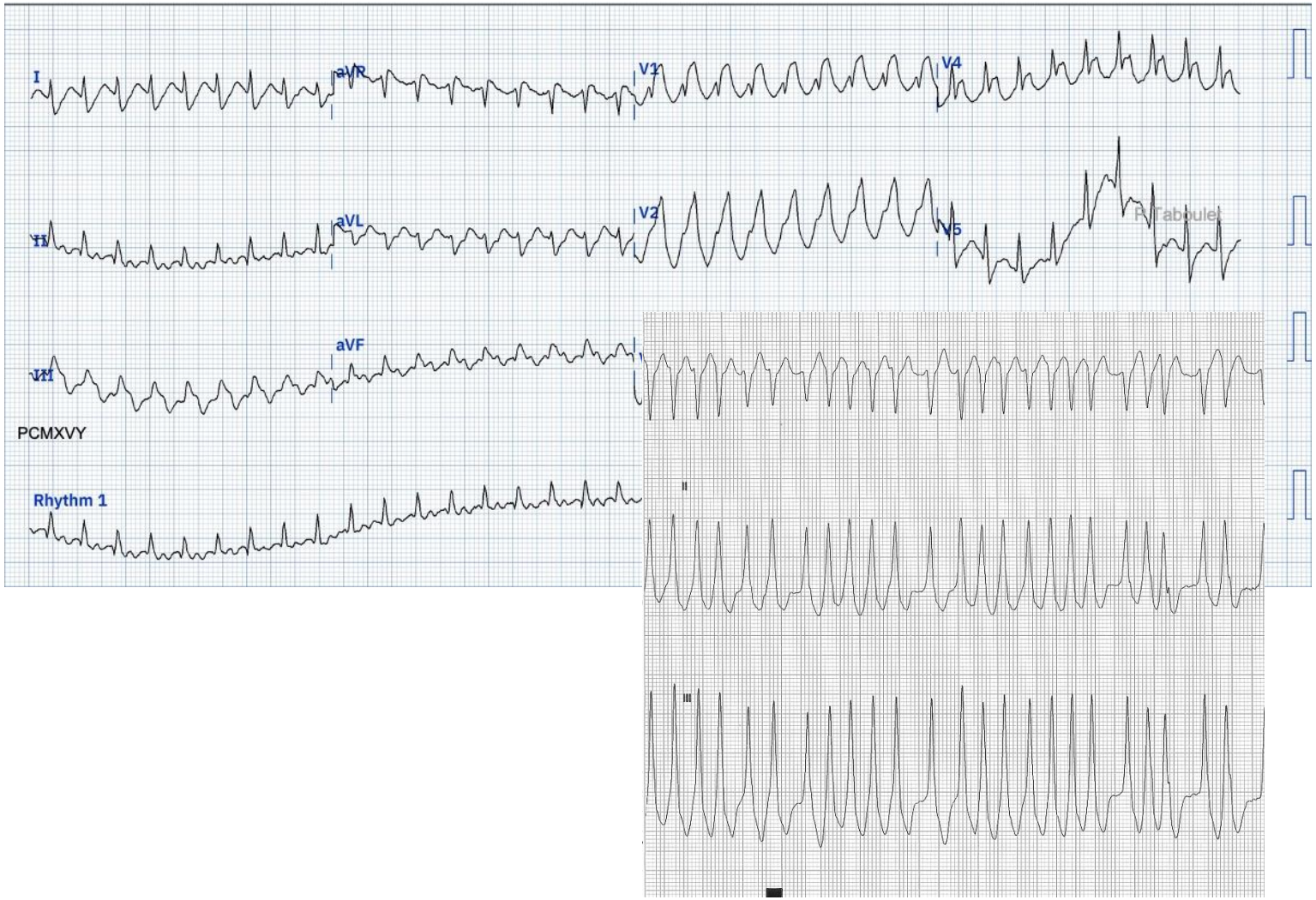


AG

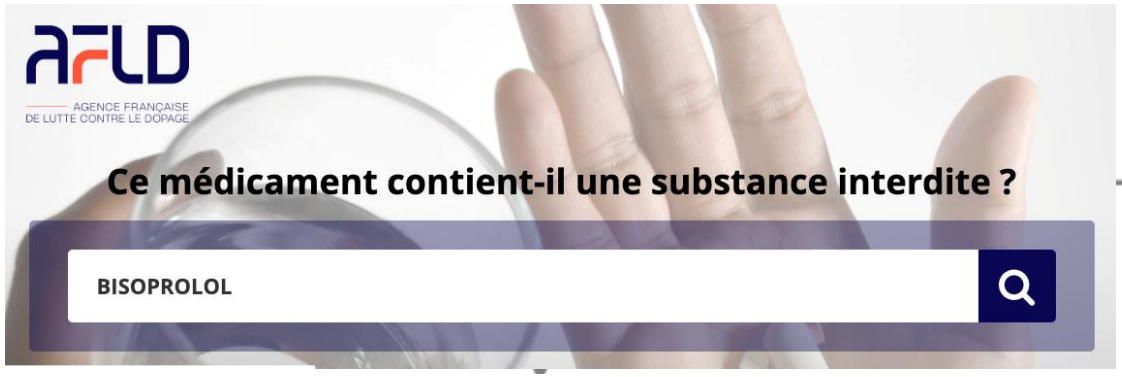
Simple TS

Veines (+ lignes)

Chez l’athlète – HRS 2024



Attention aux produits dopants…



Informations complémentaires
La détection dans l'échantillon du sportif, de n'importe quelle quantité des substances qui suivent, celles-ci étant soumises à un niveau seuil, formotérol, salbutamol, cathine, éphédrine, méthyléphédrine et pseudoéphédrine, conjointement avec un diurétique ou un agent masquant, sera considéré comme un résultat d'analyse anormal, sauf si le sportif a une AUT approuvée pour cette substance, outre celle obtenue pour le diurétique ou l'agent masquant. Les bêta-bloquants sont interdits en compétition seulement, dans les sports suivants: Automobile (FIA); Billard (toutes les disciplines) (WCBS); Fléchettes (WDF); Golf (IGF); Mini-Golf (WMF). Les bêta-bloquants sont aussi interdits en permanence (en et hors compétition) dans les sports suivants: Tir (ISSF, IPC); Tir à l'arc (WA); Sports subaquatiques (CMAS) pour les sous-disciplines de plongée libre, la chasse sous-marine et le tir sur cible.

Antiarrhythmic therapy

- Beta blocker or nondihydropyridine calcium channel blocker as tolerated (COR 1)
- Pill-in-the-pocket approach (with flecainide or propafenone with the addition of a beta blocker or nondihydropyridine calcium channel blocker) (COR 2a)
- Daily therapy with flecainide or propafenone with addition of a beta blocker or nondihydropyridine calcium channel blocker (COR 2b)

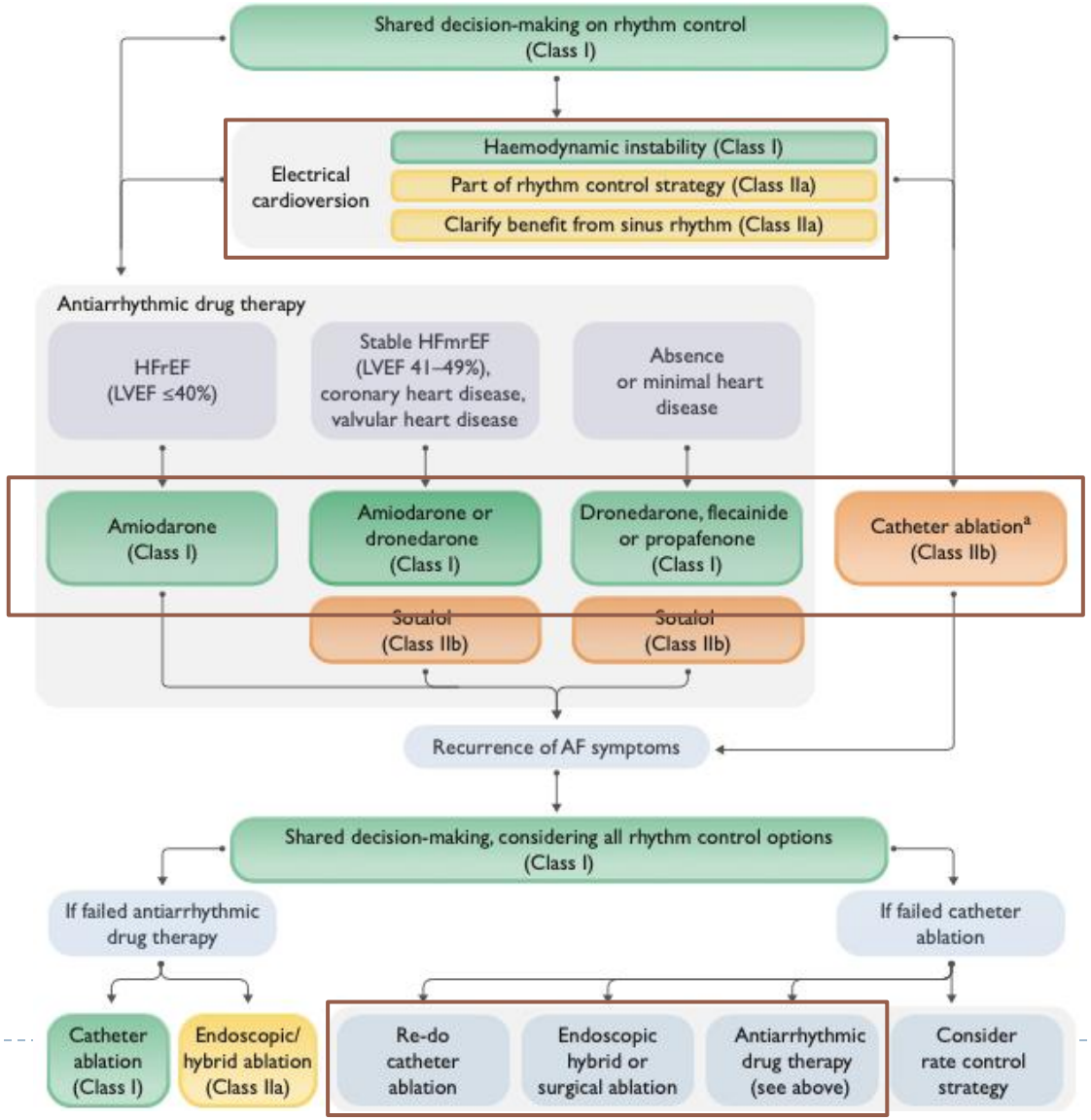
Reprise de l'activité sportive

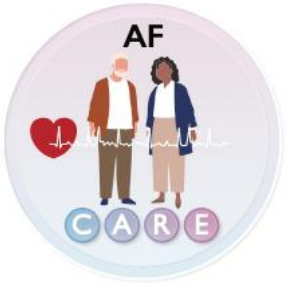
- Activité loisir ou faible intensité : 1 semaine
- Activité sportive
  - Pas avant 15 jours, reprise progressive de la charge
  - Reprise « pleine » autorisée si pas de récidive à une mois
- Compétition : 1 à 3 mois après ablation

Poursuite des traitements

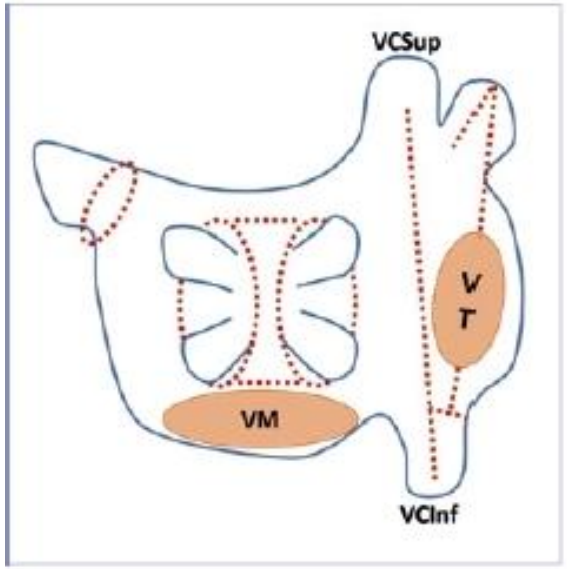
- Anticoagulants : 3 mois, puis selon CHADS VA
- Antiarythmiques : souvent un mois si prescrits avant ablation…

FA Persistante

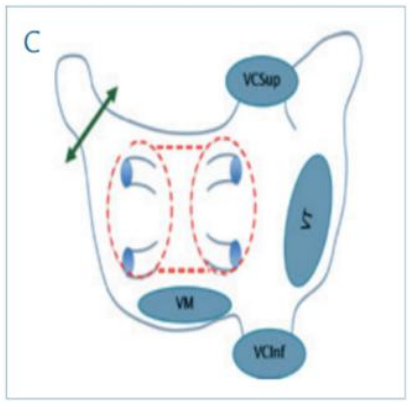


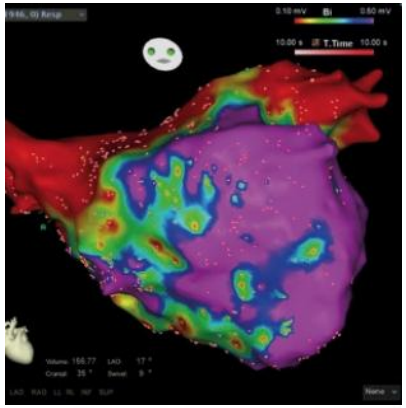


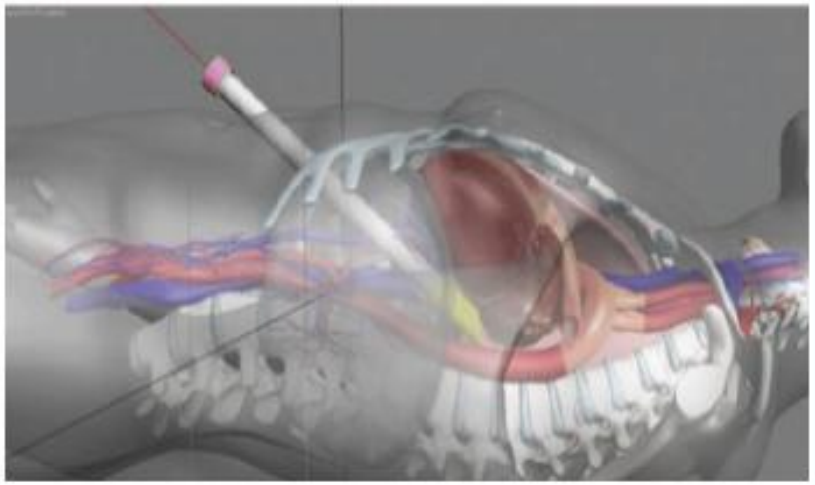
Ablation Chirurgicale et Hybride



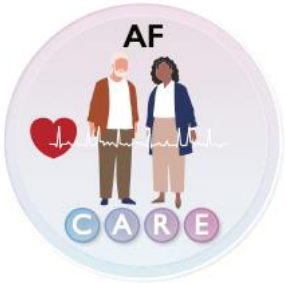
Maze (JL Cox)

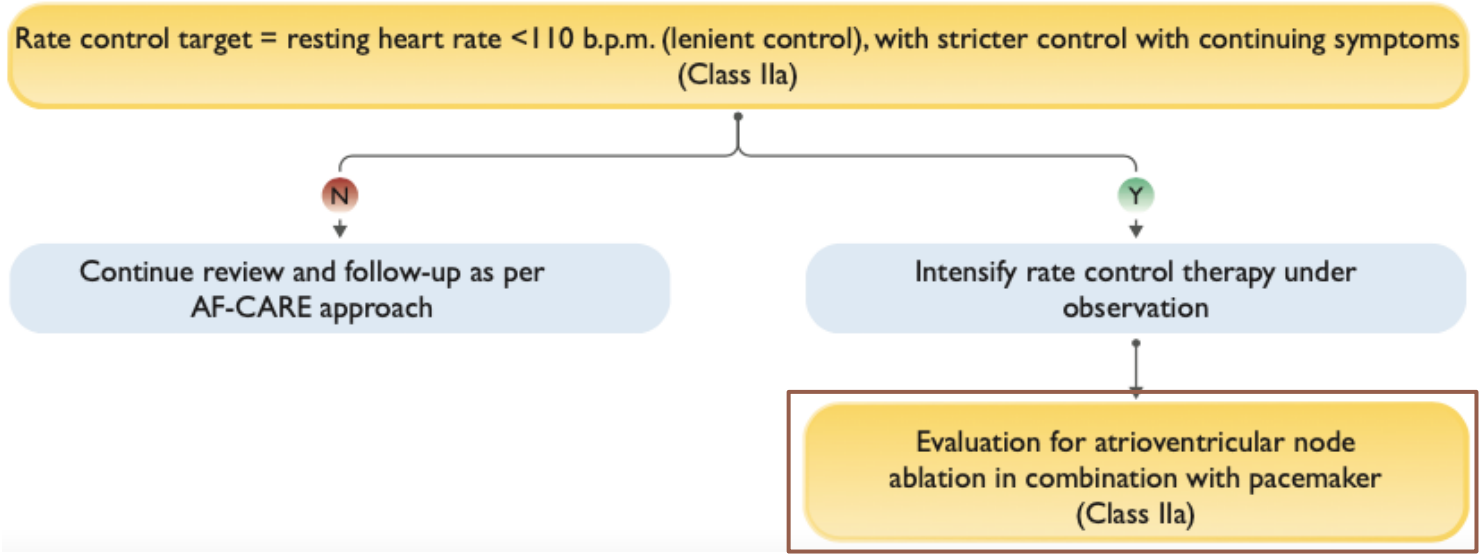




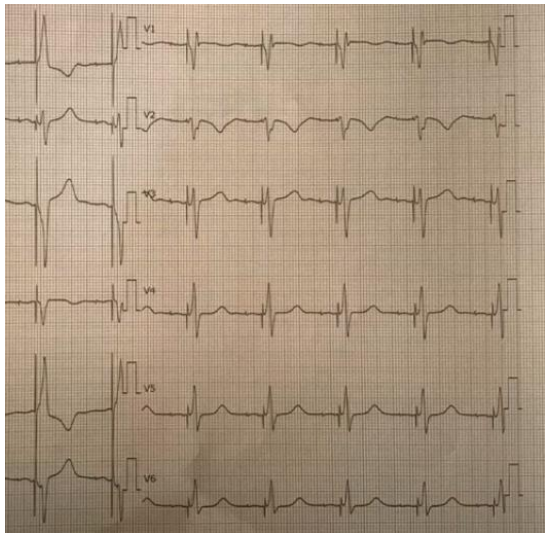


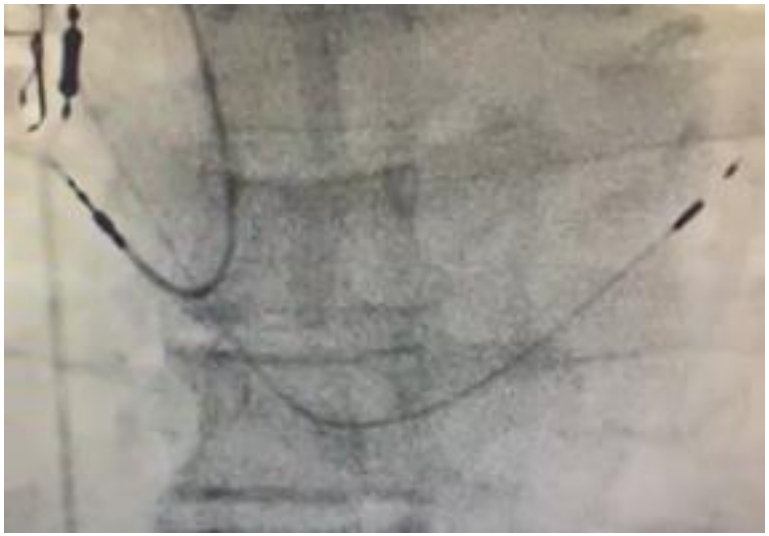
FA Permanente

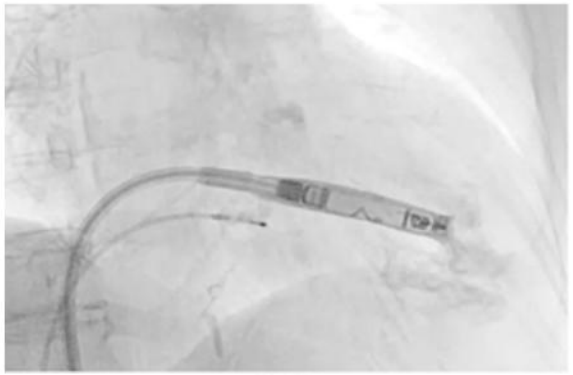




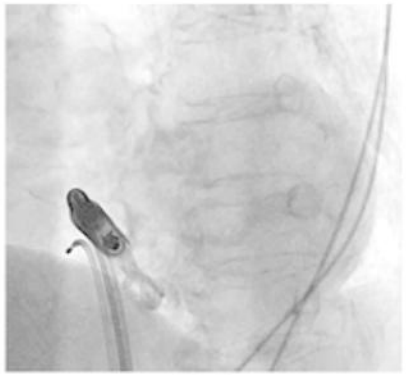
Pacemaker et Ablation du NAV





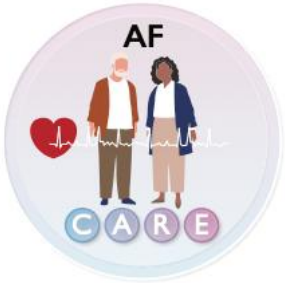


RAO



LAO

Suivi au long cours - réévaluations



E — Evaluation and dynamic reassessment

Re-evaluate when AF episodes or non-AF admissions

Regular re-evaluation: 6 months after presentation, and then at least annually or based on clinical need

ECG, blood tests, cardiac imaging, ambulatory ECG, other imaging as needed

- Assess new and existing risk factors and comorbidities (Class I)
- Stratify risk for stroke and thromboembolism (Class I)
- Check impact of AF symptoms before and after treatment (Class I)
- Assess and manage modifiable bleeding risk factors (Class I)
- Continue OAC despite rhythm control if risk of thromboembolism (Class I)

PEC de la FA chez le sportif - THM

C

- Risk factor modification (weight loss, alcohol avoidance)
- Counseling on symptom mitigation
- Expert center referral, if appropriate

(COR 1)

Consider detraining or deescalation of exercise intensity
(COR 2b)

A

OAC based on CHA_2DS_2-VASc score
(COR 1)

SDM about continued participation in sports with risk of trauma
(COR 1)

SDM on appropriateness of LAAO and/or intermittent OAC
(COR 2a)

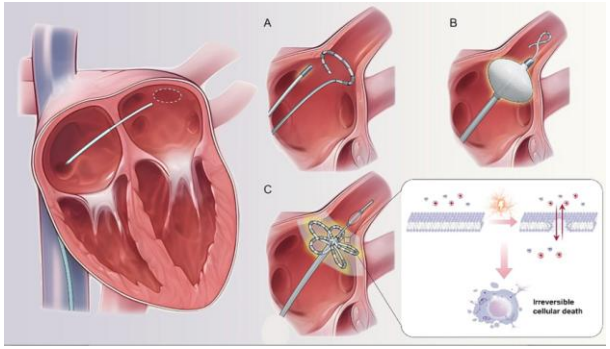
R

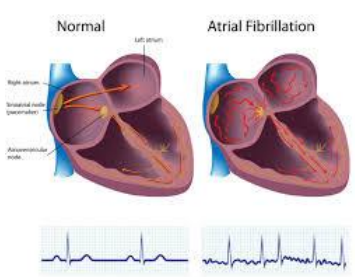
Catheter ablation for symptomatic AF
(COR 1)

Beta blocker or nondihydropyridine calcium channel blocker as tolerated
(COR 1)

Pill-in-the-pocket approach (with flecainide or propafenone with the addition of a beta blocker or nondihydropyridine calcium channel blocker)
(COR 2a)

E





PEC thérapeutique de la FA

Particularités chez le sportif

Merci de votre attention