XIV curso

Gestión Integral de los Medicamentos en los servicios de URgencias

GIMUR

FIBRILACIÓN AURICULAR

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ÍNDICE

1. Definición
2. Diagnóstico - CC
3. Manejo terapéutico - ABC

- **Terapia antitrombótica**
  - ✓ **FA postoperatoria**
  - ✓ **Pacientes con caídas**
- **Control frecuencia**
- **Control ritmo**
  - ✓ **Cardioversión**
  - ✓ **Antiarrítmicos**

1. Definición

FA clínica

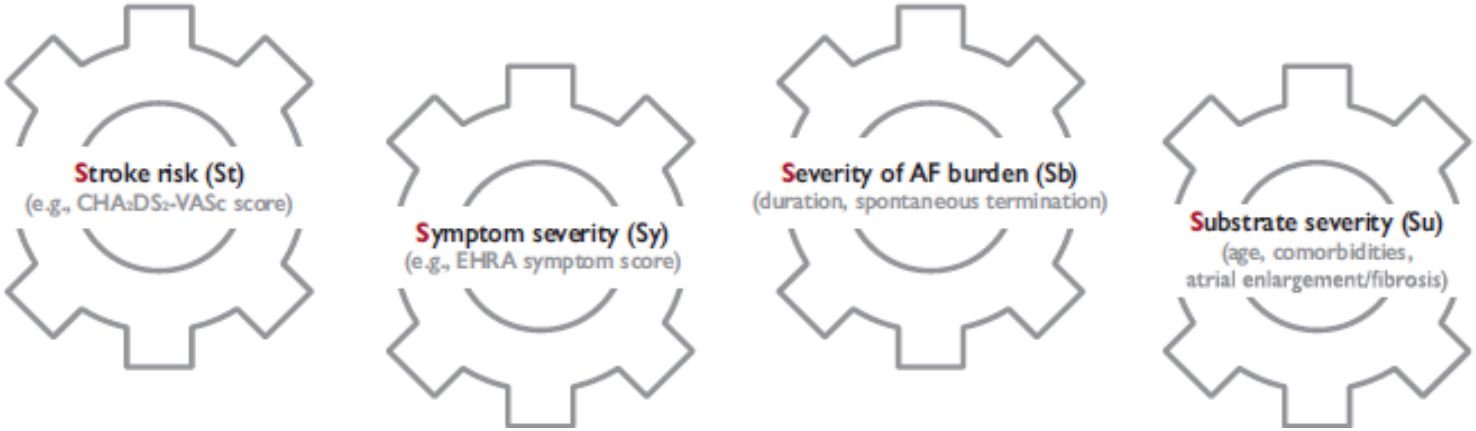
Recommendations	Class[a]
Recommendations for diagnosis of AF	
ECG documentation is required to establish the diagnosis of AF. A standard 12-lead ECG recording or a single-lead ECG tracing of >30 s showing heart rhythm with no discernible repeating P waves and irregular RR intervals (when atrioventricular conduction is not impaired) is diagnostic of clinical AF.	I

2. Diagnóstico – CC

Confirm AF

A 12-lead ECG or a rhythm strip showing AF pattern for ≥30 s

Characterise AF (the 4S-AF scheme)



Letter	Risk factor	Score
C	Congestive heart failure/LV dysfunction	1
H	Hypertension	1
A_2	Age ≥75	2
D	Diabetes mellitus	1
S_2	Stroke/TIA/thrombo-embolism	2
V	Vascular disease*	1
A	Age 65–74	1
S	Sex category (i.e., female sex)	1
	Maximum score	9

Congestive heart failure/LV dysfunction means LV ejection fraction ≤40%. Hypertension includes the patients with current antihypertensive medication. *Prior myocardial infarction, peripheral artery disease, aortic plaque. LV: left ventricular, TIA: transient ischemic attack

Criterios EHRA

1. Palpitaciones
2. Fatiga
3. Disnea
4. Dolor torácico
5. Mareo
6. Ansiedad

Table 6 EHRA symptom scale

Score	Symptoms	Description
1	None	AF does not cause any symptoms
2a	Mild	Normal daily activity not affected by symptoms related to AF
2b	Moderate	Normal daily activity not affected by symptoms related to AF, but patient troubled by symptoms
3	Severe	Normal daily activity affected by symptoms related to AF
4	Disabling	Normal daily activity discontinued

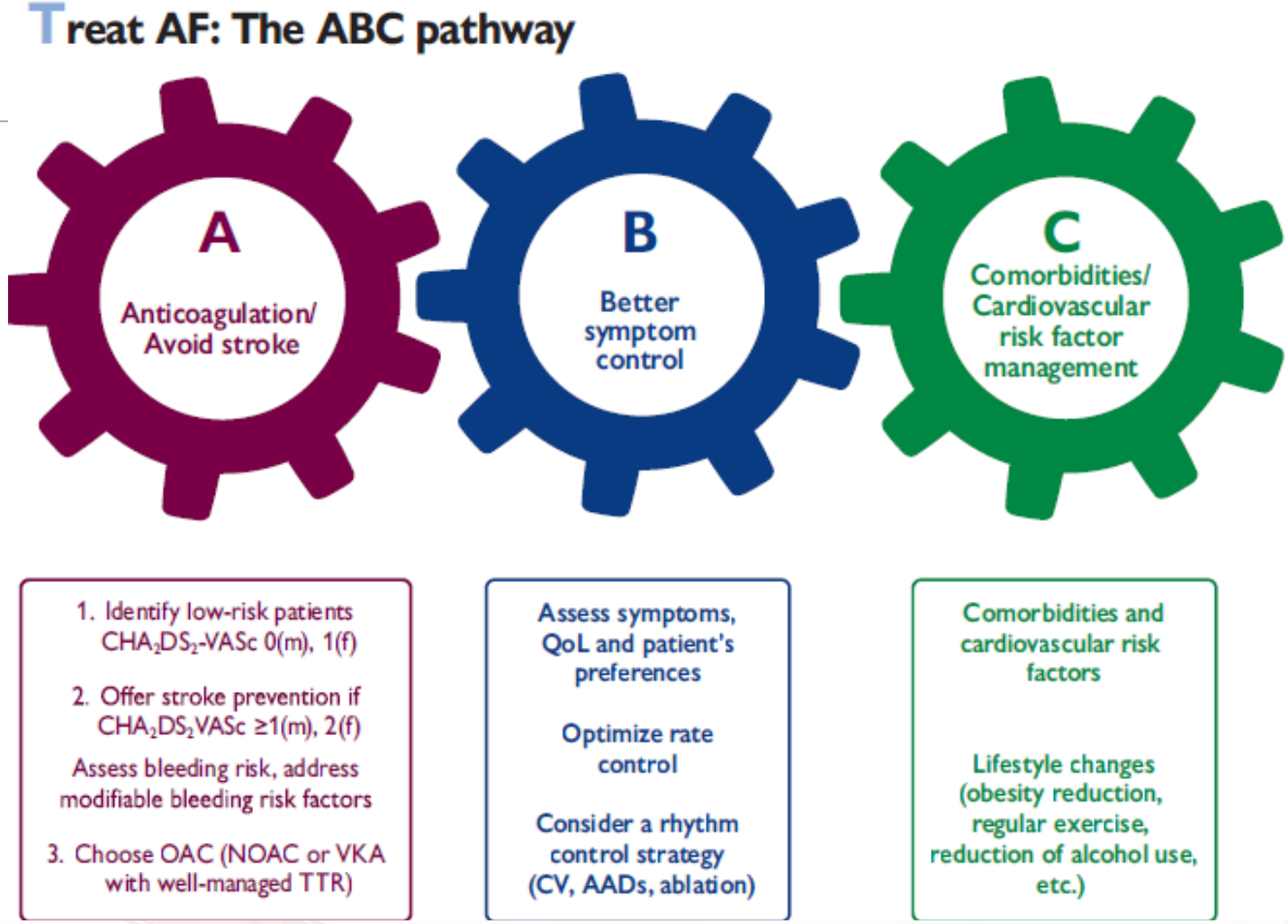
Carga de FA

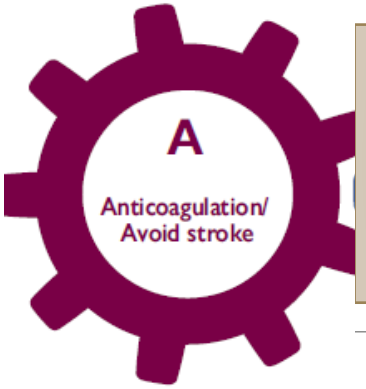
AF pattern	Definition
First diagnosed	AF not diagnosed before, irrespective of its duration or the presence/severity of AF-related symptoms.
Paroxysmal	AF that terminates spontaneously or with intervention within 7 days of onset.
Persistent	AF that is continuously sustained beyond 7 days, including episodes terminated by cardioversion (drugs or electrical cardioversion) after ≥7 days
Long-standing persistent	Continuous AF of >12 months' duration when decided to adopt a rhythm control strategy.
Permanent	AF that is accepted by the patient and physician, and no further attempts to restore/maintain sinus rhythm will be undertaken. Permanent AF represents a therapeutic attitude of the patient and physician rather than an inherent pathophysiological attribute of AF, and the term should not be used in the context of a rhythm control strategy with antiarrhythmic drug therapy or AF ablation. Should a rhythm control strategy be adopted, the arrhythmia would be re-classified as 'long-standing persistent AF'.

1. Comorbilidades/FRCV
   - ✓ Edad
   - ✓ HTA, DM
   - ✓ Enfermedad coronaria, FE
   - ✓ Enfermedad pulmonar, renal, tiroidal, obesidad)

2. Dilatación / fibrosis AI

3. Manejo ABC


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 CHA2DS2VASc ≥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.)



TERAPIA ANTITROMBÓTICA

POST-QUIRÚRGICA

20-50% post cirugía cardiaca

10-30% post cirugía torácica

5-10% en cirugía vascular o digestiva

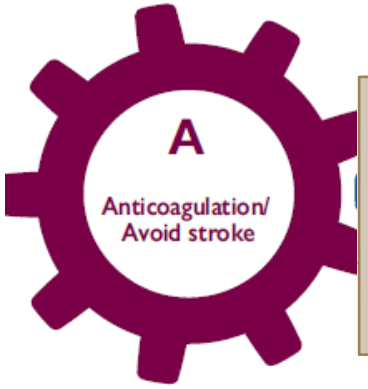
<5% resto de cirugías

La mayoría autolimitadas y asintomáticas

4-5x más riesgo de FA recurrente a los 5años

Aumento 37-62% de riesgo de tromboembolismo precoz y a largo plazo

Aumento de 37-44% de mortalidad precoz y a largo plazo



TERAPIA ANTITROMBÓTICA

POST-QUIRÚRGICA

CIRUGÍA NO CARDÍACA

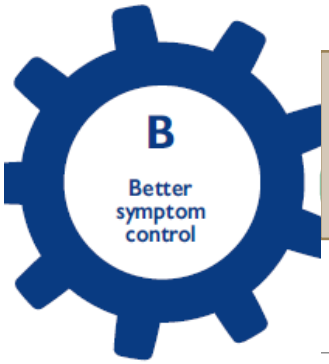
Long-term OAC therapy to prevent thrombo-embolic events should be considered in patients at risk for stroke with postoperative AF after non-cardiac surgery, considering the anticipated net clinical benefit of OAC therapy and informed patient preferences.[1404,1405,1408,1409]	IIa	B

TERAPIA ANTITROMBÓTICA

PACIENTE CON CAIDAS

The issue of falls in NOAC-treated patients was specifically analysed in subanalyses of two phase III trials. In the ENGAGE-AF TIMI 48 trial patients were prospectively classified as 'high-' or 'low falls risk' by the presence of known risk factors and co-morbidities.[70] Patients at increased risk of falling were more likely to experience a bone fracture, major bleeding or life threatening bleeding, and death. Edoxaban was associated with reduced risk of severe bleeding, intracranial haemorrhage and the most severe net clinical benefit outcomes (secondary and tertiary net clinical outcome) compared to VKA in both patient categories, and the absolute risk reduction was greater with edoxaban in patients at increased risk of falling.[70]

In the ARISTOTLE trial patients with a history of falling were older and more likely to have dementia and cerebrovascular disease. These individuals had an increased risk of major bleeding and intracranial bleeding as well as death, but the safety and efficacy of apixaban over warfarin was not affected by falling status.[345] Among patients with a history of falls no subdural bleeding was recorded on apixaban.



CONTROL DE SÍNTOMAS

NO síntomas

Síntomas 2º a FA

Asegurar que no se ha adaptado inconscientemente a la reducción de capacidad funcional

Assess factors favouring rhythm-control:

- Younger age
- 1st AF episode or short history
- Tachycardia-mediated cardiomyopathy
- Normal - moderate increased LAVI / atrial conduction delay (limited atrial remodeling)
- No or few comorbidities / heart disease
- Rate control difficult to achieve
- AF precipitated by a temporary event (acute illness)
- Patient's choice

No

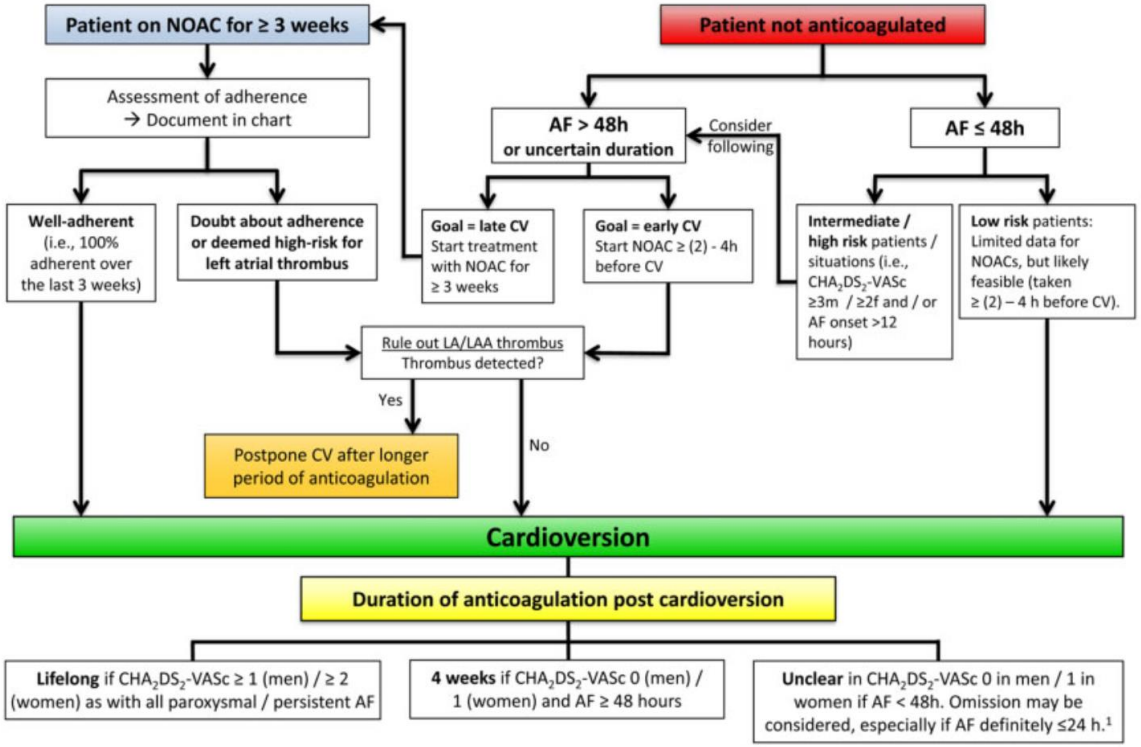
Control FC

Control Ritmo

B
Better symptom control

MANEJO TERAPÉUTICO

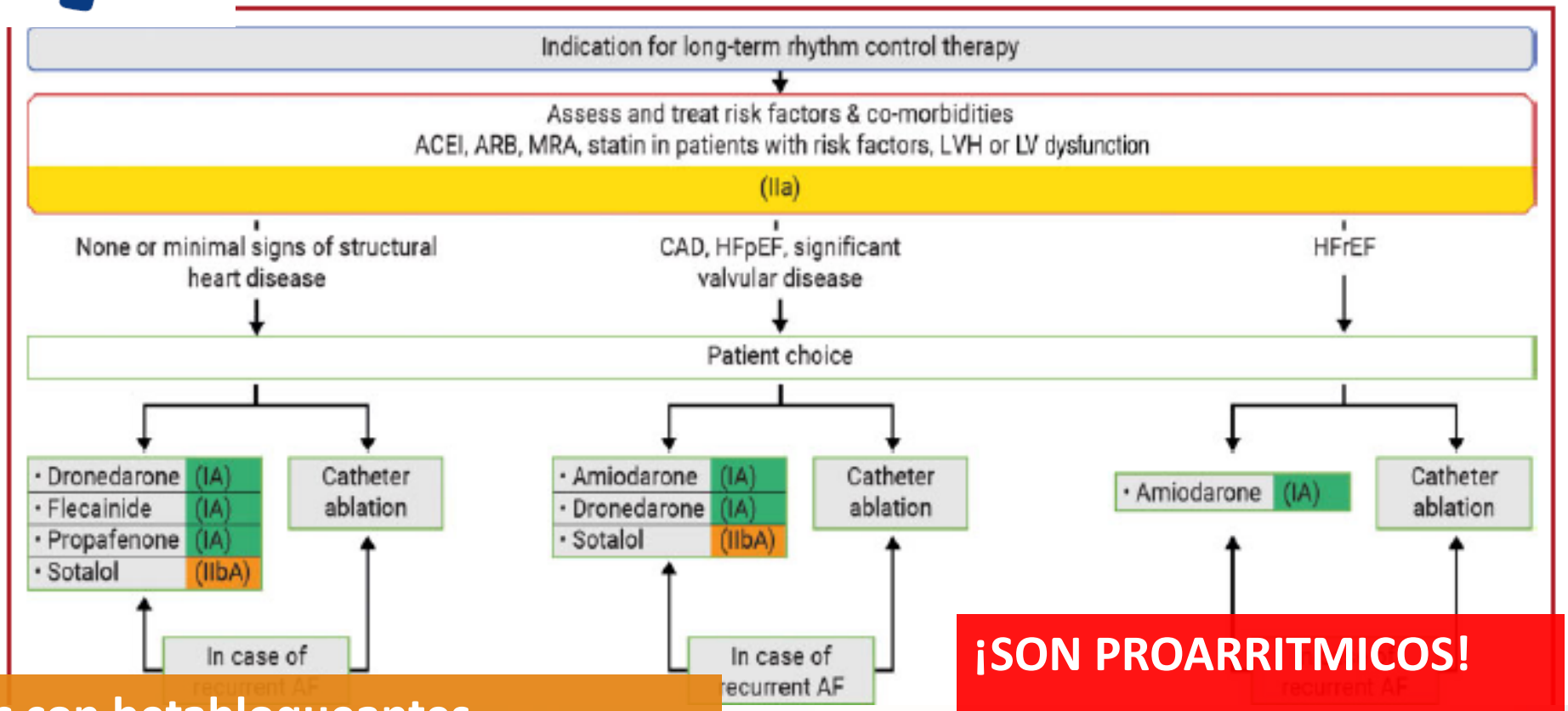
CONTROL DEL RITMO



B
Better symptom control

CONTROL DEL RITMO:

ANTIARRÍTMICOS



Ic con betabloqueantes

¡SON PROARRITMICOS!

TRATAMIENTO FARMACOLÓGICO

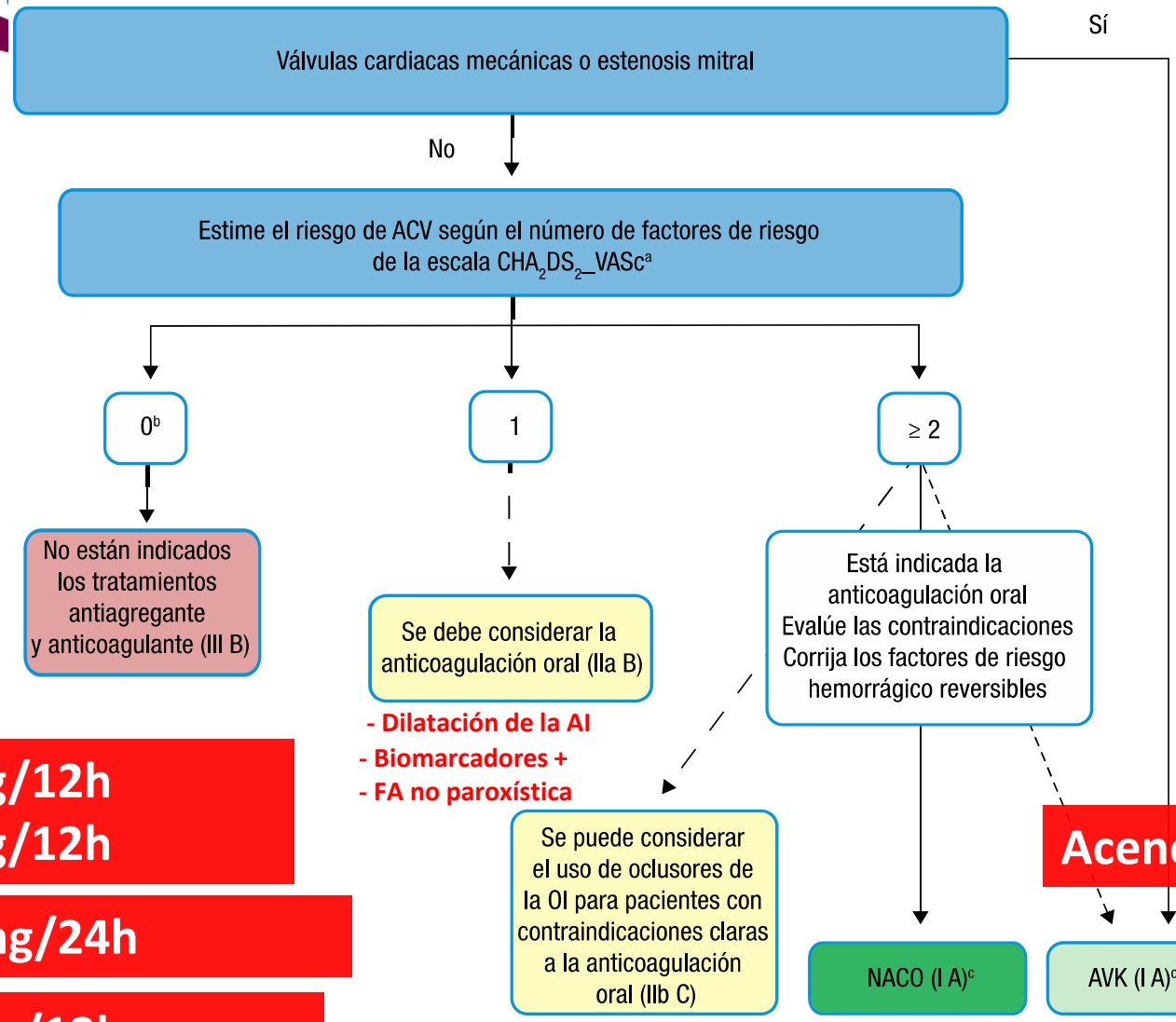
ALIVIAR LOS SÍNTOMAS

PREVENIR TROMBOEMBOLIA

CONTROLAR DETERIORO HEMODINÁMICO

Control de respuesta ventricular y/o ritmo

TERAPIA ANTITROMBÓTICA



DAB 150 mg/12h
DAB 110 mg/12h

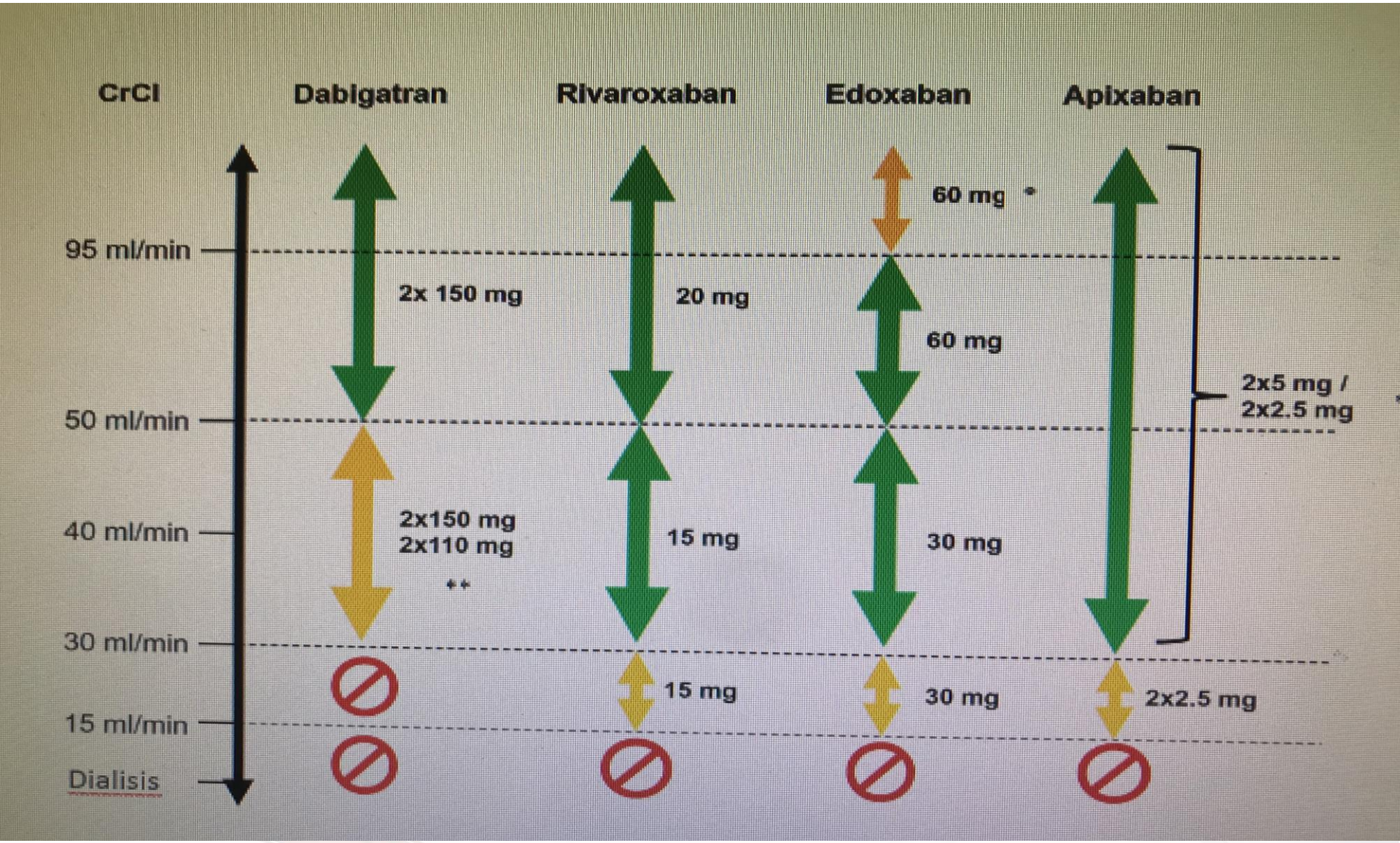
RIV 15-20 mg/24h

API 2,5-5 mg/12h

EDO 30-60 mg/24h

Acenocumarol

TERAPIA ANTITROMBÓTICA



TERAPIA ANTITROMBÓTICA

Factores de riesgo de sangrado modificables y no modificables de los pacientes anticoagulados según las escalas de riesgo hemorrágico

R	*Hipertensión (especialmente cuando la presión arterial sistólica es > 160 mmHg)*[a-c]
R	*INR lábil o tiempo en rango terapéutico < 60% en pacientes tratados con antagonistas de la vitamina K*
R	*Medicación que predispone al sangrado, como fármacos antiagregantes y antiinflamatorios no esteroideos*[a,d]
R	*Consumo excesivo de alcohol (≥ 8 bebidas por semana)*[a,b]
R	*Anemia*[b-d]
	Función renal afectada[a-d]
	Función hepática afectada[a,c]
	Recuento o función plaquetaria reducida[b]
	Edad[c] *(> 65 años*[a]*, ≥ 75 años)*[b-d]
	Antecedente de sangrado mayor[a-d]
	ACV previo[a,b]
	Enfermedad renal dependiente de diálisis o trasplante renal[a,c]
	Enfermedad hepática cirrótica[a]
	Malignidad[b]
	Factores genéticos[b]
	Factores de riesgo hemorrágico según biomarcadores
	Troponina de alta sensibilidad[e]
	Factor 15 de diferenciación de crecimiento[e]
	Creatinina sérica/AclCr estimado[e]

¡Control de factores de riesgo modificables!

HAS-BLED

ORBIT

ABC

ATRIA

HEMORR2HAGES

CONTROL DE FRECUENCIA

B
Better symptom control

FA >40 lpm

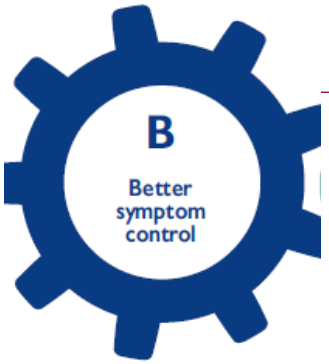
Escala modificada de la *European Heart Rhythm Association* para la clasificación de los síntomas (modificada de Wynn et al.)[10]

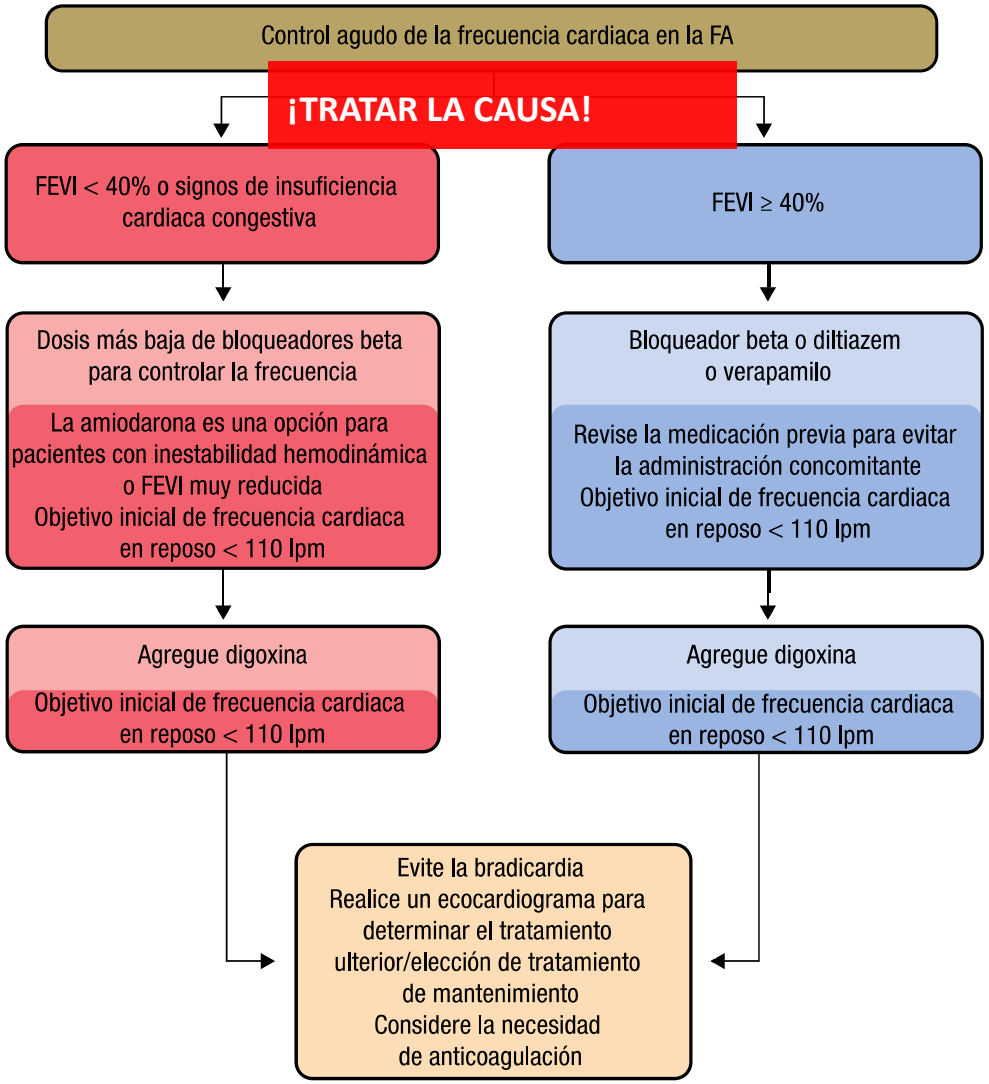
Escala de la EHRA modificada	Síntomas	Descripción
1	Ninguno	La FA no causa síntoma alguno
2a	Leves	La actividad diaria normal no está afectada por los síntomas de la FA*
2b	Moderados	La actividad diaria normal no está afectada por los síntomas de la FA, pero los síntomas suponen un problema para el paciente
3	Graves	La actividad diaria normal está afectada por los síntomas de la FA
4	Discapacitantes	Se interrumpe la actividad diaria normal

< 110 lpm

¡TRATAR LA CAUSA!

CONTROL DE FRECUENCIA





CONTROL DE FRECUENCIA

ATENOLOL: 2,5 – 5 mg IV

DILTIAZEM:0,25 mg/kg + 0,35 mg/kg IV→ 5-15 mg/h PC

DIGOXINA:0,5 mg bolo + 0,25mg/2-4-6-8h hasta 1,25 mg

AMIODARONA: 300 mg bolo IV (+ 10-20 mg/kg PC 24h)

FE>40%

FE<40% y/o ICA

CONTROL DE FRECUENCIA

DIGOXINA:0,5 mg bolo + 0,25mg/2-4-6-8h hasta 1,25 mg

ClinCalc.com

Digoxin Calculator

Digoxin dosing tool for heart failure and atrial fibrillation

ClinCalc.com » Cardiology » Digoxin Calculator for Heart Failure and Atrial Fibrillation

Patient Parameters

Age	68	years
Height	164	in / cm
Weight	73	kg / lbs
Gender		Male / Female
Creatinine	1.3	mg/dL
Indication		CHF / Afib / Both

Digoxin Parameters

Dosage form: Injection (IV)

Target level: 1.5 ng/mL

Reset | Calculate

US units

RESULTS

Recommended Dosing | Equations

Loading Dosing (optional)

0.5 mg IV
(9 mcg/kg IBW)

Given as three **divided doses** over 12 hours:

- 0.25 mg IV given initially
- 0.125 mg IV given 6 hours later
- 0.125 mg IV given 6 hours later

Maintenance Dose

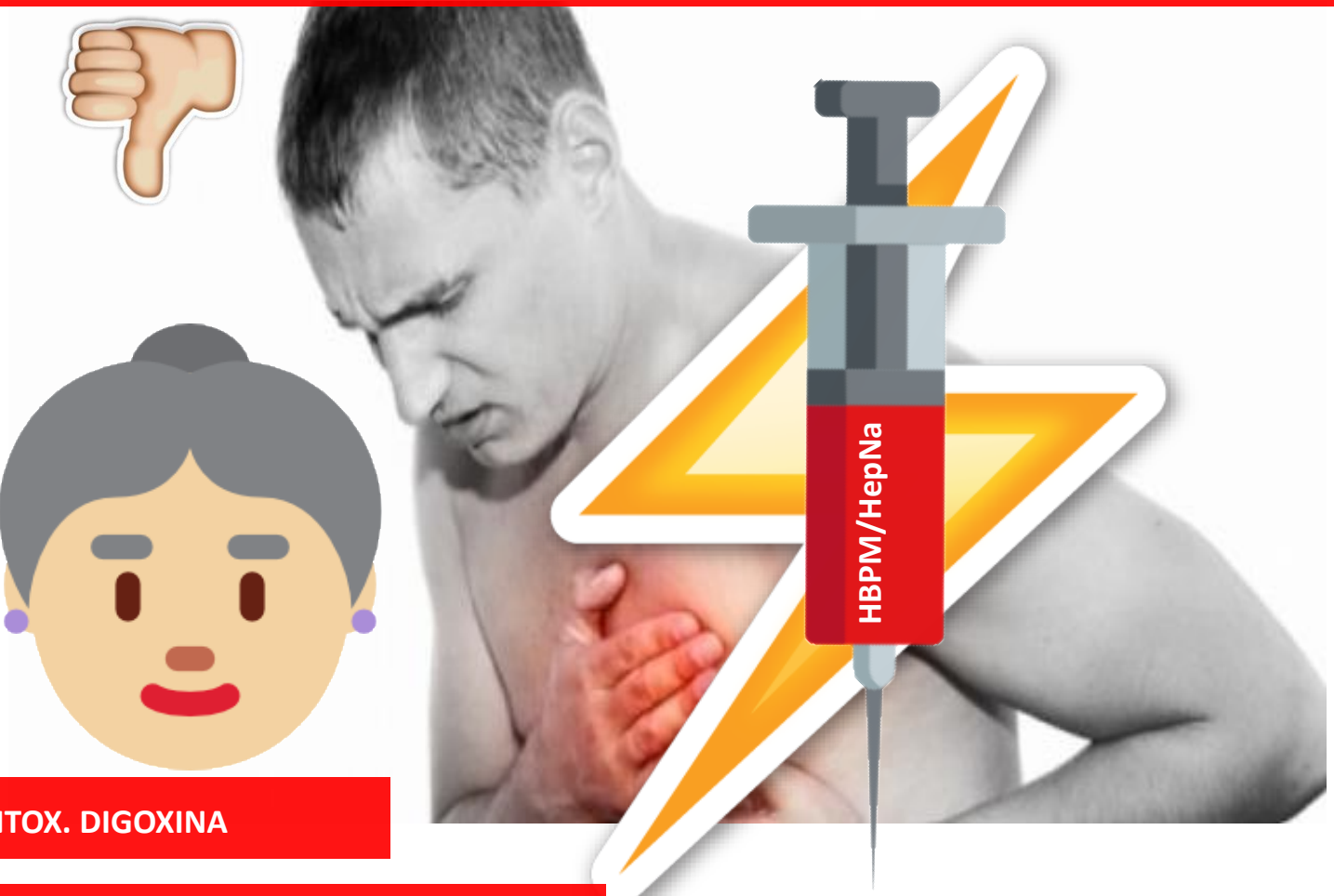
Daily dose: 0.25 mg

Predicted level: 1.38 ng/mL

Recalculate

CONTROL DEL RITMO

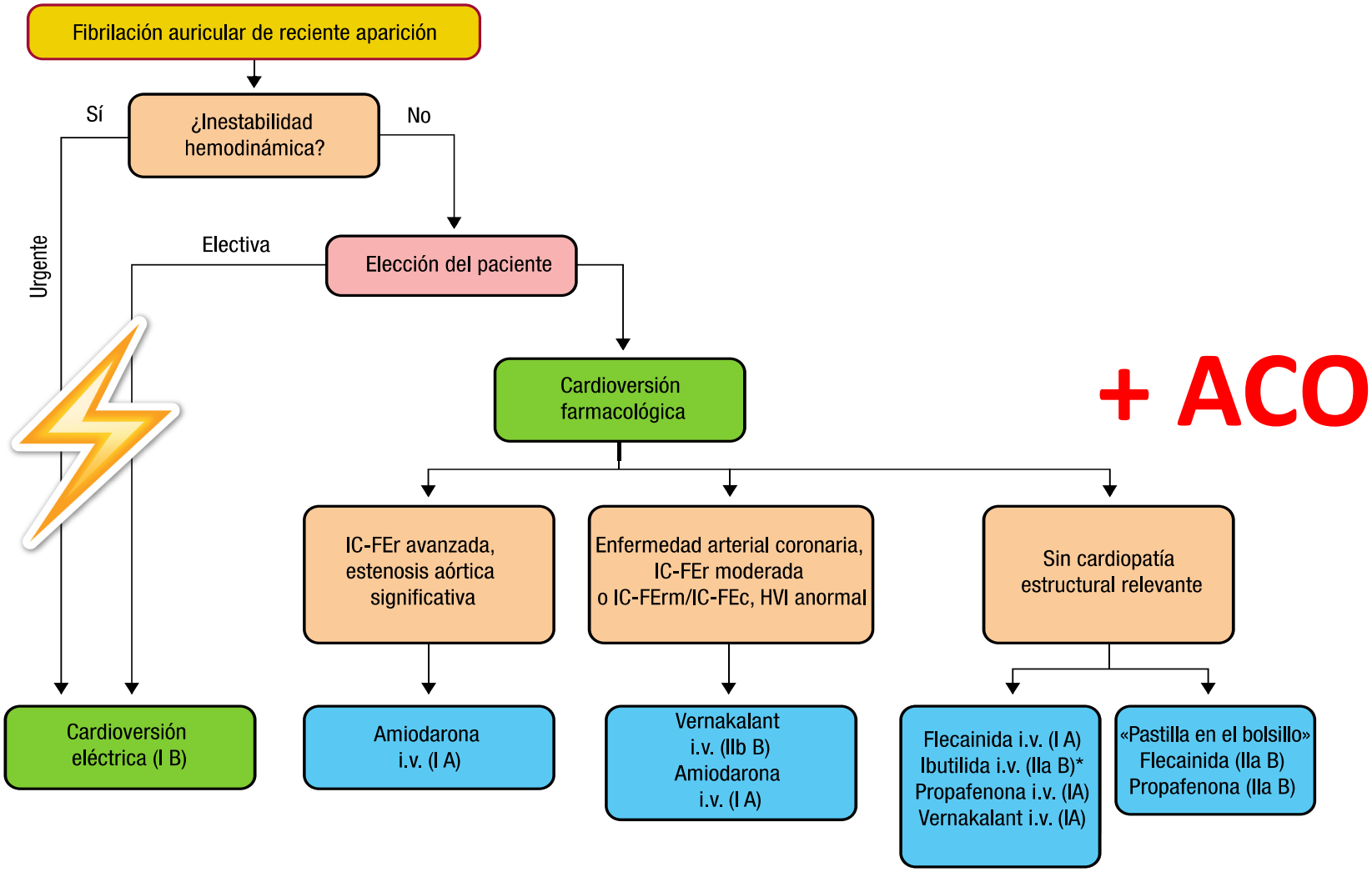
ALIVIAR LOS SÍNTOMAS



INTOX. DIGOXINA

DIGOXINA + hipoPOTASEMIA

CONTROL DEL RITMO



CONTROL DEL RITMO

AMIODARONA: 5-7 mg/kg IV(1-2h)+ 50mg/h (hasta 24h)

VERNAKALANT: 3 mg/kg(10 min) + 2mg/kg(10 min)

FLECAINIDA: 200-300 mg VO ó 1,5-2 mg/kg IV(10 min)

PROPAFENONA:: 450-600 mg VO ó 1,5-2 mg/kg IV(10 min)

SIN CARDIOPATÍA

CON CARDIOPATÍA SEVERA

CONCLUSIONES

- Patología tiempo-dependiente: control del deterioro hemodinámico.
- Selección y dosificación adecuada de estrategia y tratamiento de control.
- Estratificación de riesgo para selección óptima de tratamiento antitrombótico.
- Individualización de tratamiento antitrombótico.
- Manejo y dosificación según comorbilidades, situación clínica y evidencia.