
Congreso de la SAC24
Sociedad Asturiana
de Cardiología
17 y 18 de mayo
SOCIEDAD
ASTURIANA DE
CARDIOLOGÍA
Anticoagulación en
escenarios particulares.
Hot Topics
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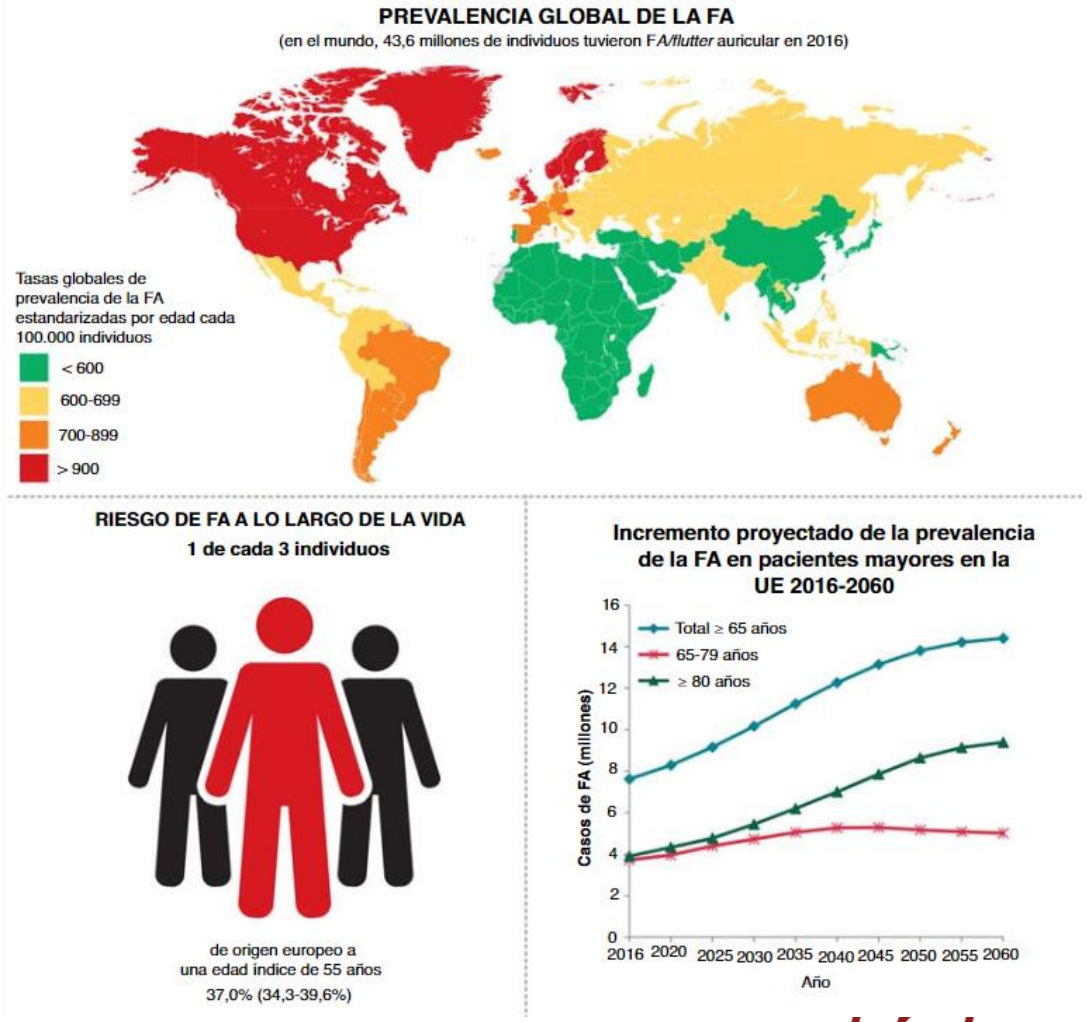
#AsturCardio2024

Fibrilación auricular

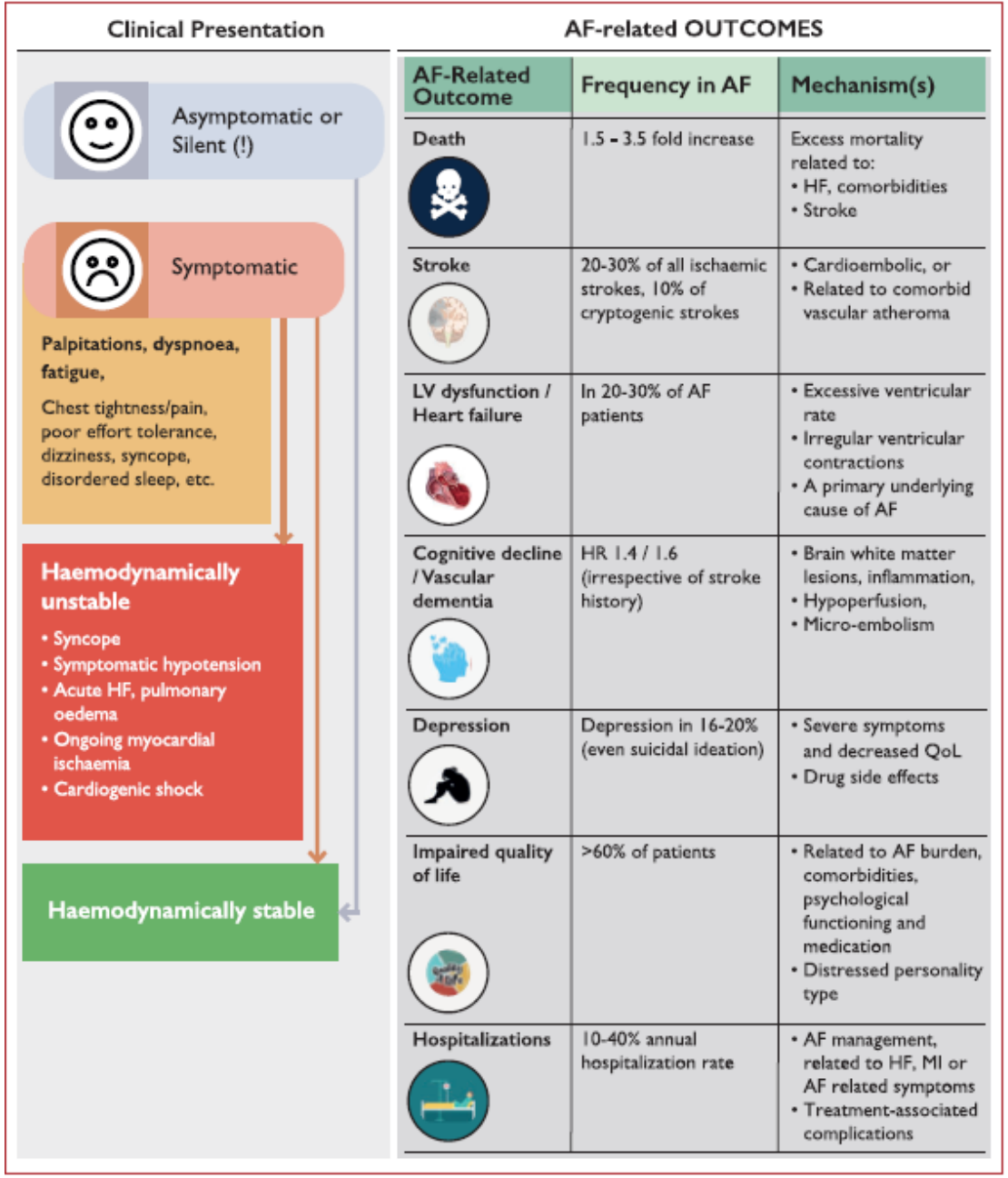
Arritmia sostenida más frecuente en adultos.

Prevalencia 2-4% en adultos. Se espera aumento 230%.

A lo largo de la vida 1:4, en europeos >55 años 1:3.



G. Hindricks et al. Rev Esp Cardiol. 2021; 74(5):437.e1–437.



Impacto de la FA

G. Hindricks et al. European Heart Journal (2020) 00, 1-126

Valoración del riesgo tromboembólico

Chadsvasc risk factors [click on present risk factors]

RISK FACTORS	SCORE
Congestive heart failure	1
Hypertension	1
Age ≥ 75	2
Age 65-74	1
Diabetes mellitus	1
Stroke/TIA/thrombo-embolism	2
Vascular disease	1
Sex Female	1
Your score	0

CHADSVASC clinical risk estimation. Adapted from Lip et al. See Van den Ham et al. below for actual risks in a larger population.

CHA_2DS_2VASc SCORE	PATIENTS (n=7329)	ADJUSTED STROKE RATE (% year)
0	1	0%
1	422	1,3%
2	1230	2,2%
3	1730	3,2%
4	1718	4,0%
5	1159	6,7%
6	679	9,8%
7	294	9,6%
8	82	6,7%
9	14	15,2%

Anticoagulación en la Fibrilación auricular

Recomendaciones para la prevención de eventos tromboembólicos en la FA

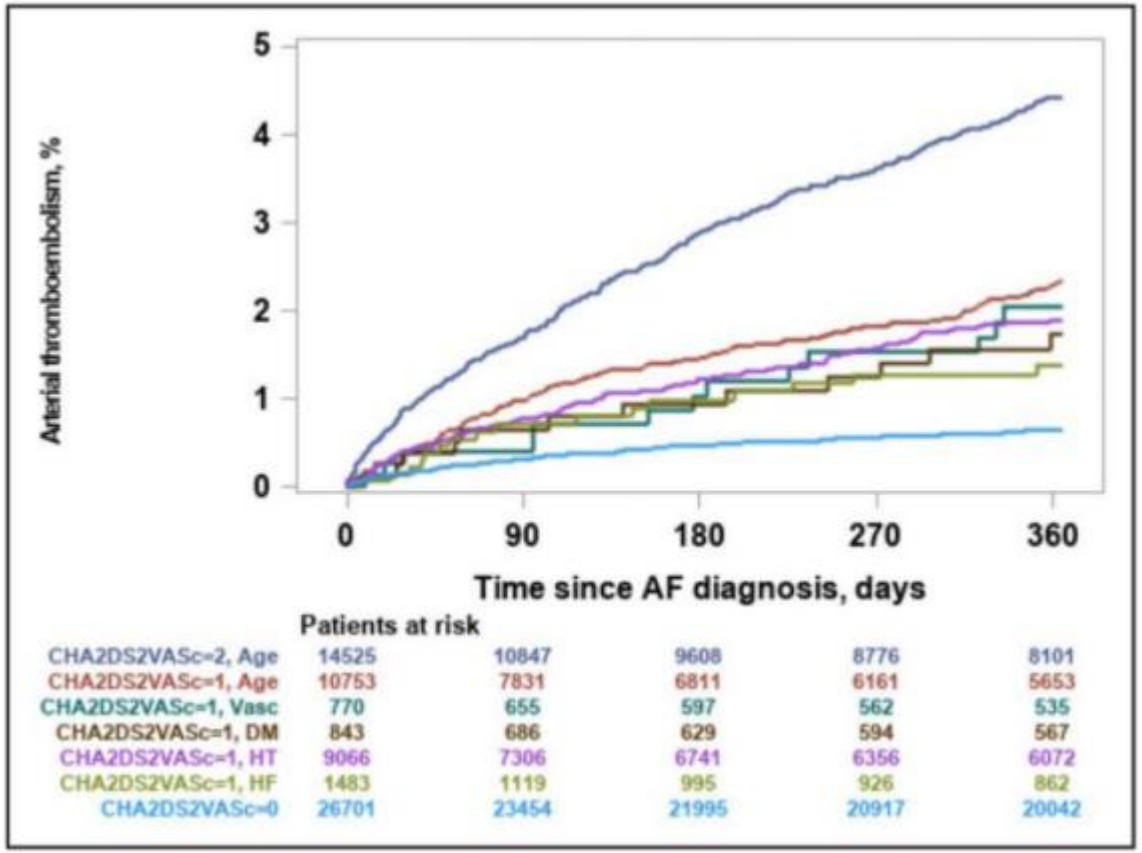
Recomendaciones	Clase[a]	Nivel[b]
Para la prevención del ictus en pacientes con FA que son elegibles para ACO, se recomienda el uso de un NACO en lugar de un AVK (excepto para pacientes con válvulas mecánicas o estenosis mitral de moderada a grave)[423,424]	I	A
Para la evaluación del riesgo de ictus, se recomienda una estrategia basada en la evaluación de los factores de riesgo mediante la escala clínica CHA_2DS_2-VASc para identificar inicialmente a los pacientes con «riesgo de ictus bajo» (CHA_2DS_2-VASc de 0 puntos los varones y 1 punto las mujeres), a los que no se debe ofrecer tratamiento antitrombótico[334,388]	I	A
Se recomienda la administración de ACO para la prevención del ictus en pacientes con FA y una puntuación CHA_2DS_2-VASc $\geq$ 2 los varones o $\geq$ 3 las mujeres[412]	I	A
Se debe considerar la administración de ACO para la prevención del ictus en pacientes con FA y CHA_2DS_2-VASc de 1 punto los varones o 2 puntos las mujeres El tratamiento debe ser individualizado teniendo en cuenta el beneficio clínico neto y los valores y las preferencias de los pacientes[338,378,380]	IIa	B

G. Hindricks et al. Rev Esp Cardiol. 2021; 74(5):437.e1–437.

Anticoagulación en CHA2DS2-VASc 1

- En la guía europea se basan en 1 artículo que sugiere que grupo se podría beneficiar en CHA2DS2-VASc 1:
  - Edad > 65 años, NTproBNP > 300, TFG <50 mL/kg/min, AI > 45 mm.

- Otras investigaciones sugieren que, aunque exista mayor riesgo percibido, no alcanza diferencia estadísticamente significativa (imagen).



Shin et al. J Am Heart Assoc. 2019;8.

Østergaard et al. Circulation 2024. 149:764-773.

Anticoagulación en CHA2DS2-VASc 1

Estudio retrospectivo, análisis de bases de datos 8 países europeos.

Pacientes con FA período 1/1/11 al 31/10/18. Seguimiento 2.5 años o primer evento.

Paciente con CHA2DS2-VASc 1 no relacionado sexo.

ACOD se asoció a menor incidencia de ictus, aunque mayor sangrado (a expensas GI, no el intracraneal). Beneficio clínico neto favorece ACOD.

AVK no logró reducir ictus, a la vez que presentó tendencias a mayor hemorragia. Beneficio clínico neto fue neutro.

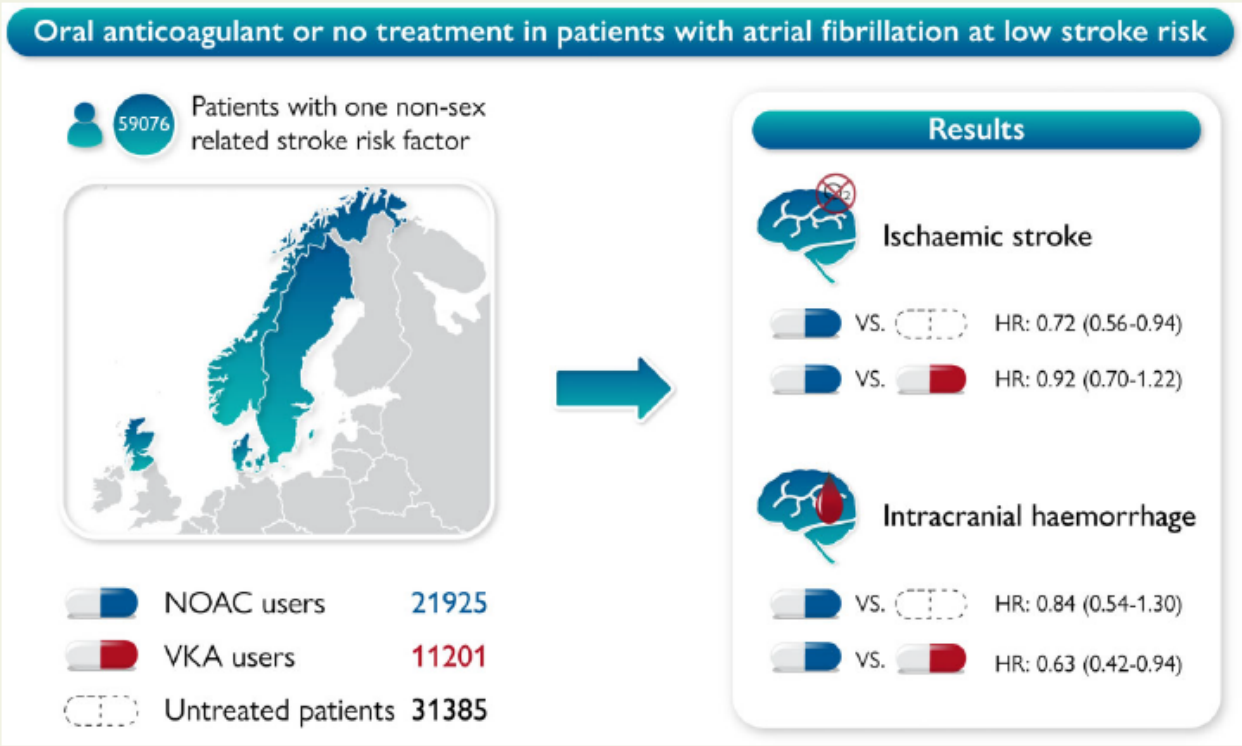
No se identificaron subgrupos de mayor riesgo.

Key findings

- Non-vitamin K antagonist oral anticoagulant (NOAC) treatment was associated with a lower stroke rate compared with no treatment.
- Non-vitamin K antagonist oral anticoagulant treatment was associated with a lower rate of intracranial haemorrhage compared with vitamin K antagonist (VKA) treatment.

Take-home message

These observational data suggest that NOAC treatment may be associated with a positive net clinical benefit compared with no treatment or VKA treatment in patients at low stroke risk, a hypothesis that can be tested through a randomized controlled trial.



Komen J et al. European Heart Journal (2022) 43, 3528–3538

Anticoagulación independiente de CHA2DS2-VASc: miocardiopatías

Según ESC:

- Con CHA2DS2-VASc 0: indicada en HCM, Amiloidosis y restrictiva.
- Resto miocardiopatías: debe ser considerada. Indicada según CHA2DS2-VASc, si ICC o FEVI reducida.

Recommendations	Class[a]	Level[b]
Anticoagulation		
Oral anticoagulation in order to reduce the risk of stroke and thrombo-embolic events is recommended in all patients with HCM or cardiac amyloidosis and AF or atrial flutter (unless contraindicated).[332,365,369,371,373,378,413,427,428,456–464]	I	B
Oral anticoagulation to reduce the risk of stroke and thrombo-embolic events is recommended in patients with DCM, NDLVC, or ARVC, and AF or atrial flutter with a CHA_2DS_2-VASc score ≥2 in men or ≥3 in women.[465–469]	I	B
Oral anticoagulation to reduce the risk of stroke and thrombo-embolic events should be considered in patients with RCM and AF or atrial flutter (unless contraindicated).	IIa	C
Oral anticoagulation to reduce the risk of stroke and thrombo-embolic events should be considered in patients with DCM, NDLVC, or ARVC, and AF or atrial flutter with a CHA_2DS_2-VASc score of 1 in men or of 2 in women.[470–472]	IIa	B

Arbelo E et al. European Heart Journal (2023) 00, 1–124

Anticoagulación independiente de CHA2DS2-VASc: miocardiopatías

Indicada con CHA2DS2-VASc 0: Amiloidosis, HCM y restrictiva.
A considerar en arritmogénica, periparto o no compactada. En dilatada si CHA2DS2-VASc ≥ 1.

Table 2 Morphological feature, incidence of thromboembolism and stroke, and impact of AF in cardiomyopathy subtypes

Cardiomyopathy subtype	Morphological feature	Incidence of TE	Prevalence of stroke	Relative risk of stroke/TE with vs. without AF
HCM	LV hypertrophy without dilation	Annual incidence of 0.8–1.3%[31,48,49]	3–5%[9,48,50]	8 times (21% vs. 2.6%)[]
DCM	LV or biventricular dilation with systolic dysfunction	Annual incidence of 3.5%[51]	4.5%[9]	N/A
RCM	Increased myocardial stiffness with impaired ventricular filling	N/A	4.5%[9]	N/A
CM	Increased biventricular wall thickness with restrictive LV filling, often without LV dilation	7.6%[52]	5.2%[52]	2.2 times (10.6% vs. 4.9%)[52]
HES	Increased myocardial stiffness and impaired ventricular filling together with sustained serum eosinophilia	25%[23,53]	15%[54]	N/A
ARVC	RV wall thinning and aneurysmal dilatation with dysfunction and risk of sudden cardiac death	4%[24,26,30]	N/A	N/A
LVNC	Prominent LV trabeculae with a thin compacted layer and deep intertrabecular recesses	13–24%[55–57]	N/A	N/A
TTS	Acute transient LV wall motion abnormality, often triggered by emotional or physical stress	2.2–12.2%[16,58]	N/A	1.7 times (5.4% vs. 3.2%)[17]
PPCM	Systolic dysfunction (LVEF < 45%) occurring during peripartum period	6.8–17%[59,60]	N/A	N/A

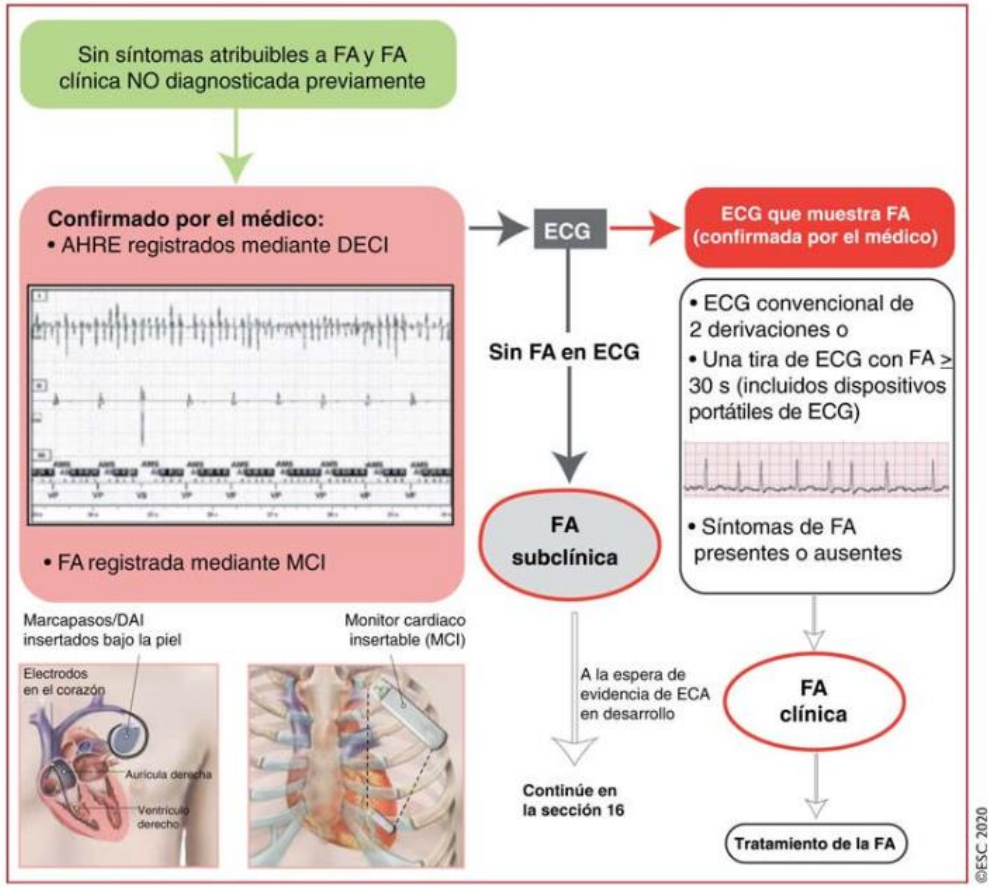
AF, atrial fibrillation; ARVC, arrhythmogenic right ventricular cardiomyopathy; DCM, dilated cardiomyopathy; HCM, hypertrophic cardiomyopathy; HES, hypereosinophilic syndrome; LV, left ventricular; LVEF, left ventricular ejection fraction; LVNC, left ventricular noncompaction; N/A, not applicable; RCM, restrictive cardiomyopathy; RV, right ventricular; TE, thromboembolism; TTS, Takotsubo syndrome.

	Concomitant AF	Enlarged LAD
HCM	OAC recommended	OAC considered in obstructive HCM with LAD ≥ 48 mm
DCM	OAC recommended as CHA_2DS_2-VASc score ≥ 1	—
RCM	OAC suggested	—
CM	VKA or direct thrombin inhibitors recommended	—
HES	—	—
ARVC	OAC considered	—
LVNC	VKA preferred	—
TTS	—	—
PPCM	LMWH recommended; VKA might be considered during lactation or during the second/third trimester	—

Zhu et al. ESC Heart Failure 2021;8: 4737–4750

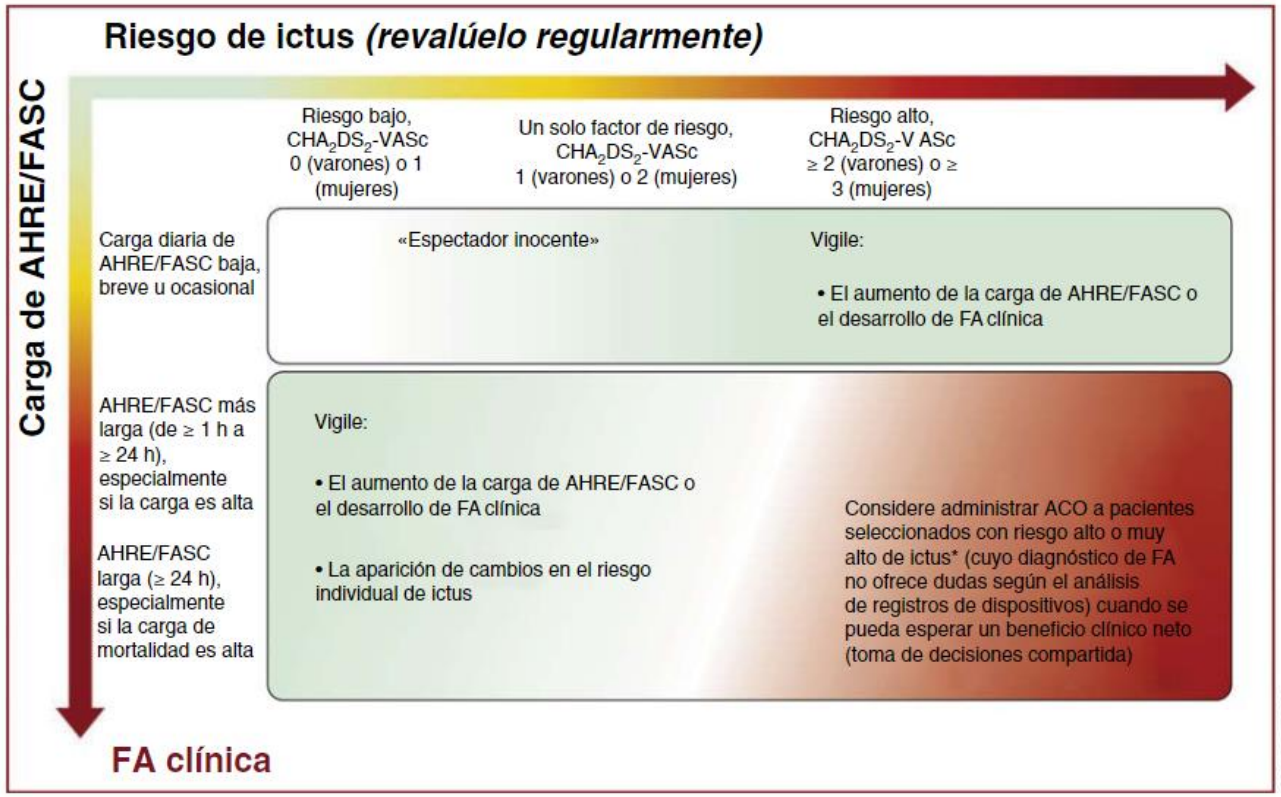
FA subclínica (AHRE)

- Episodios de frecuencia auricular elevada (AHRE) identificada por dispositivos implantables, sin sintomatología atribuibles a FA.
- Se recomienda valorar la carga de AHRE durante las revisiones de dispositivos. Influye el número de episodios y su duración.



G. Hindricks et al. Rev Esp Cardiol. 2021; 74(5):437.e1–437.

Posición guías sobre AHREs



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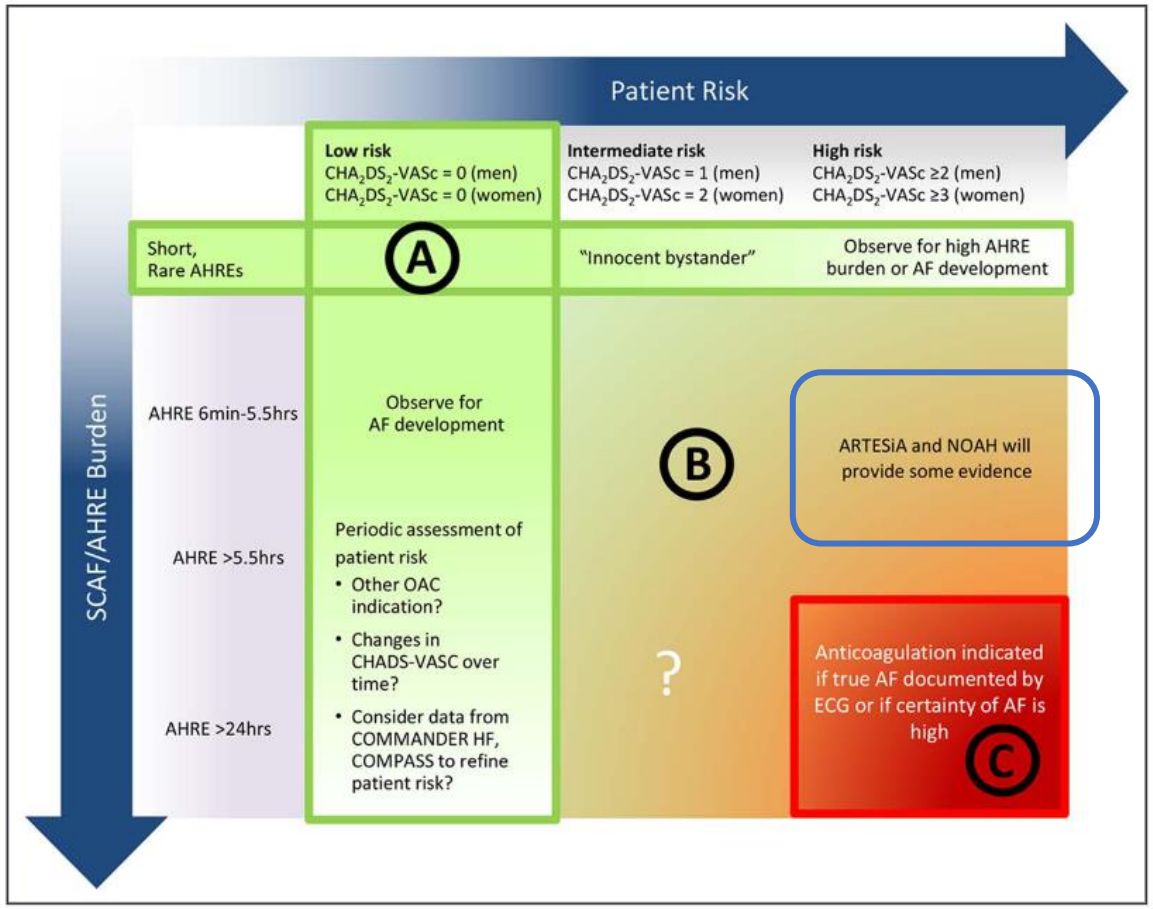


Joglar et al. Circulation. 2024;149:e1–e156.

Anticoagulación en FA subclínica: Reducción evento isquémico

McIntyre W, et al. Circulation. 2024;149:981–988.

Metaanálisis de 2 ensayos clínicos.

Episodios 6 mins a 24 horas.

Total 6,548 pacientes.

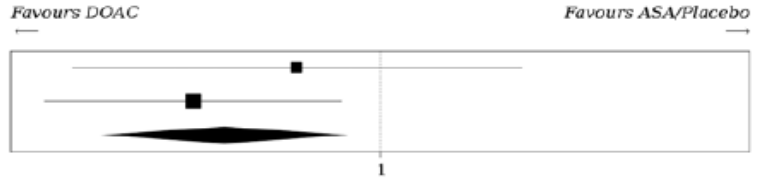
ACOD VS AAS o placebo.

Reducción 32% riesgo de ictus. RR 0.68 [95% CI, 0.50–0.92]. ACOD no logró reducir mortalidad total, a la vez que aumentó sangrado mayor y su combinado. Beneficio clínico neto fue neutro.

Ischemic Stroke

Study	DOAC	(%)	ASA/Placebo	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	22/1,270	(1.7%)	27/1,266	(2.1%)	30.4%	0.81 [0.47, 1.42]
ARTESiA	45/2,015	(2.2%)	71/1,997	(3.6%)	69.6%	0.63 [0.43, 0.91]
Pooled Estimate	67/3,285	(2.0%)	98/3,263	(3.0%)	I^2: 0%	0.68 [0.5, 0.92]

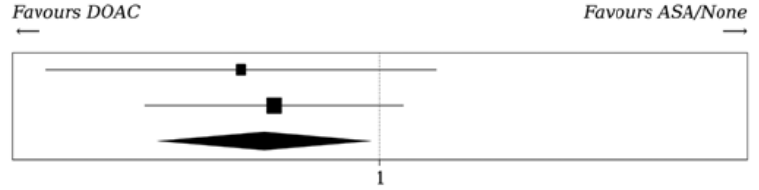
Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.01, z=2.47, τ²=0.00* — *RR: Risk Ratio, CI: Confidence Interval*



Composite of All-cause Stroke, Peripheral Arterial Embolism, Myocardial Infarction, Pulmonary Embolism or Cardiovascular Death

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	83/1,270	(6.5%)	101/1,266	(8.0%)	30.4%	0.82 [0.62, 1.08]
ARTESiA	189/2,015	(9.4%)	218/1,997	(10.9%)	69.6%	0.86 [0.71, 1.03]
Pooled Estimate	272/3,285	(8.3%)	319/3,263	(9.8%)	I^2: 0%	0.85 [0.73, 0.99]

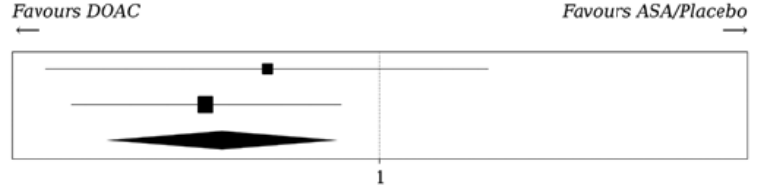
Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.03, z=2.11, τ²=0.00* — *RR: Risk Ratio, CI: Confidence Interval*



All-cause Stroke

Study	DOAC	(%)	ASA/Placebo	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	22/1,270	(1.7%)	29/1,266	(2.3%)	27.1%	0.76 [0.44, 1.31]
ARTESiA	55/2,015	(2.7%)	84/1,997	(4.2%)	72.9%	0.65 [0.46, 0.91]
Pooled Estimate	77/3,285	(2.3%)	113/3,263	(3.5%)	I^2: 0%	0.68 [0.51, 0.9]

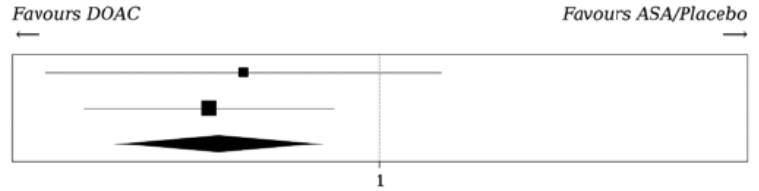
Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.01, z=2.68, τ²=0.00* — *RR: Risk Ratio, CI: Confidence Interval*



All-cause Stroke or Systemic Embolism

Study	DOAC	(%)	ASA/Placebo	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	23/1,270	(1.8%)	33/1,266	(2.6%)	28.5%	0.69 [0.41, 1.18]
ARTESiA	55/2,015	(2.7%)	86/1,997	(4.3%)	71.5%	0.63 [0.45, 0.88]
Pooled Estimate	78/3,285	(2.4%)	119/3,263	(3.6%)	I^2: 0%	0.65 [0.49, 0.86]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.00, z=2.99, τ²=0.00* — *RR: Risk Ratio, CI: Confidence Interval*



Congreso SAC24

SOCIEDAD ASTURIANA DE CARDIOLOGÍA

Anticoagulación en FA subclínica: Sangrados y mortalidad.

McIntyre W, et al. Circulation. 2024;149:981–988.

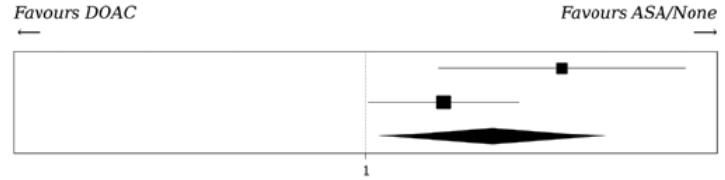
Aumento 62% sangrado mayor. RR 1.62 [95% CI, 1.05–2.5]. Aumento del evento combinado sangrado mayor o mortalidad por cualquier causa.

Major Bleeding

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	53/1,270	(4.2%)	25/1,266	(2.0%)	41.1%	2.11 [1.32, 3.38]
ARTESiA	106/2,015	(5.3%)	78/1,997	(3.9%)	58.9%	1.35 [1.01, 1.79]
Pooled Estimate	159/3,285	(4.8%)	103/3,263	(3.2%)	I^2: 61%	1.62 [1.05, 2.5]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.03, z=2.18, τ²=0.06*

RR: Risk Ratio, CI: Confidence Interval

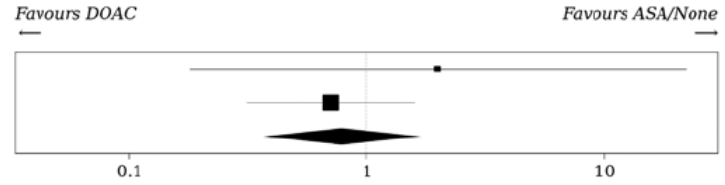


Fatal Bleeding

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	2/1,270	(0.2%)	1/1,266	(0.1%)	10.2%	1.99 [0.18, 21.96]
ARTESiA	10/2,015	(0.5%)	14/1,997	(0.7%)	89.8%	0.71 [0.32, 1.59]
Pooled Estimate	12/3,285	(0.4%)	15/3,263	(0.5%)	I^2: 0%	0.79 [0.37, 1.69]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.54, z=0.61, τ²=0.00*

RR: Risk Ratio, CI: Confidence Interval

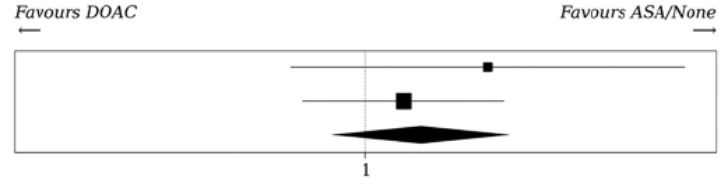


All-cause Mortality

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	111/1,270	(8.7%)	94/1,266	(7.4%)	20.6%	1.18 [0.9, 1.53]
ARTESiA	362/2,015	(18.0%)	341/1,997	(17.1%)	79.4%	1.05 [0.92, 1.2]
Pooled Estimate	473/3,285	(14.4%)	435/3,263	(13.3%)	I^2: 0%	1.08 [0.96, 1.21]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.23, z=1.21, τ²=0.00*

RR: Risk Ratio, CI: Confidence Interval

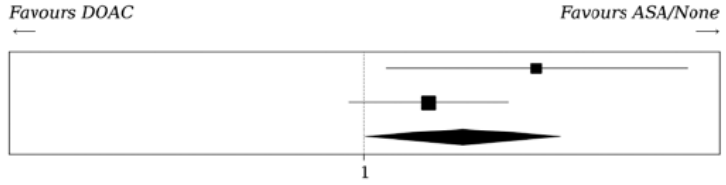


All-cause Mortality or Major Bleeding

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	149/1,270	(11.7%)	114/1,266	(9.0%)	31.9%	1.3 [1.03, 1.64]
ARTESiA	431/2,015	(21.4%)	387/1,997	(19.4%)	68.1%	1.1 [0.98, 1.25]
Pooled Estimate	580/3,285	(17.7%)	501/3,263	(15.4%)	I^2: 35%	1.16 [1.0, 1.35]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.05, z=1.96, τ²=0.00*

RR: Risk Ratio, CI: Confidence Interval



Conclusiones:

CHA2DS2-VASc 0	CHA2DS2-VASc 1	AHREs

• Anticoagular en miocardiopatías:
  • MCH
  • Amiloidosis.
  • Restrictivas (HES).
	• Otras miocardiopatías.
	• Población general: se pueden beneficiar **si es con ACOD**, especialmente si:
	  ➢ Edad >65 años.
	  ➢ NTproBNP elevado.
	  ➢ ERC.
	  ➢ AI muy dilatada.
		• Anticoagular si ambas:
		  • CHA2DS2-VASc > 2 (o 3 mujeres)
		  • Episodios > 24 horas.

Muchas gracias por su atención.