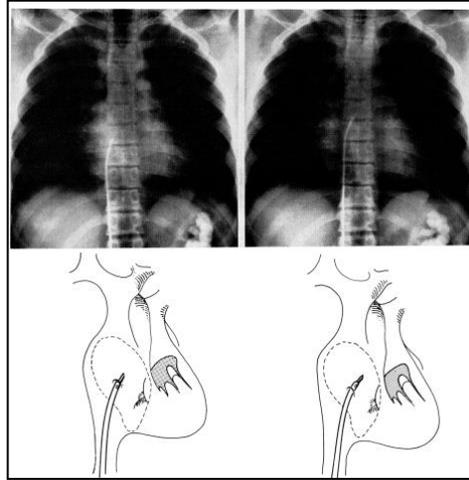
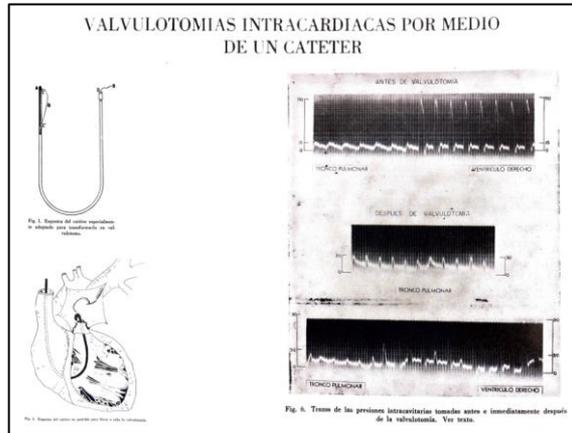


DONDE ESTAMOS EN INTERVENCIONISMO ESTRUCTURAL EN EL 2022

David Martí Sánchez
Profesor Asociado de Cardiología
Hospital Central de la Defensa, Madrid

Un viaje de 50 años

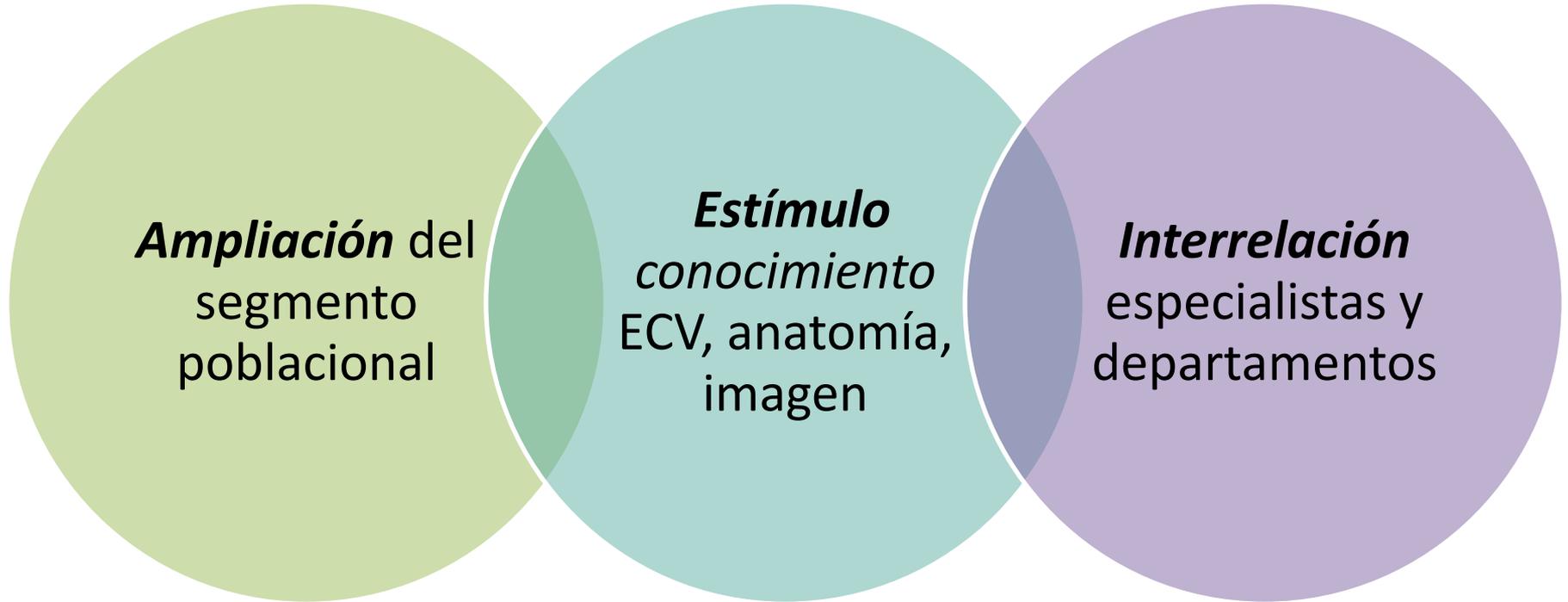


1952

1959

2002

Repercusión sobre la Cardiología Moderna



TAVI hoy

- Sedación consciente
- Sin sonda vesical
- 1 AF + 1 AR
- Estimulación por guía
- Movilización 6 horas
- Alta en **24-48 horas**

Pacientes candidatos a alta precoz en 24-48 horas

- | |
|--|
| • Pacientes con acceso transfemoral |
| • Pacientes en CF NHYA II con apoyo familiar |
| • No signos de sangrado, AIT/ACVA o infección |
| • No alteraciones relevantes analíticas (Hemoglobina, creatinina) |
| • Ecocardiograma con válvula normofuncionante |
| • Valoración del sistema de conducción <ul style="list-style-type: none">◦ ritmo sinusal con $PR < 240\text{mseg}$ y $QRS < 160\text{mseg}$ no BRDHH◦ FA: $QRS < 140\text{mseg}$ sin BRDHH◦ Ausencia de ritmo nodal, bradicardia o taquicardia◦ Portador de marcapasos previo |

Intervencionismo Estructural

- Valvulopatías:
 - Pulmonar
 - Aórtica
 - Mitral
 - Tricúspide
 - Fugas paravalvulares
- Orejuela
- Ablación septal
- Cortocircuitos:
 - CIA
 - FOP
 - CIV
 - DAP
 - Fístulas sistémicas o pulmonares
- Obstrucciones vasculares:
 - Coartación aórtica
 - Arterias pulmonares
 - Venas pulmonares

Intervencionismo Estructural

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TAVI

Estudios clínicos

	Partner B	Partner A	CV Pivotal	PARTNER 2	SURTAVI	NOTION	PARTNER 3	EVOLUT LR
Edad	83	84	83	82	80	79	73	74
STS	11,5	11,7	7,4	5,8	4,5	3,0	1,9	1,9
Mort	30	24	14	16,7 (2y)	11,4 (2y)	4,9	1,0	4,5 (2y)
Ictus	6,7	5,5	4,9	5,5	3,4	1,4	0,6	3,4
Vasc	16	17	5,9	7,9	6,0	5,6	2,2	3,8
MCP	3,4	3,8	19,8	8,5	25,9	34,1	6,5	17,4

Resultados actuales

- **PARTNER 2 TF:**
 - Muerte/ictus a 2 años:
16,8% v. 20,4%
- **Estudios MR/LR:**
 - Compl vascular v. Sangrado
 - Marcapasos v. FA
 - IAO v. ACV/Degeneración*

Registro Español (2014-2018)

Edad 81,2 ± 6,7

STS 5 (3-7)

Mortalidad 30d: 5%

Ictus: 1,9%

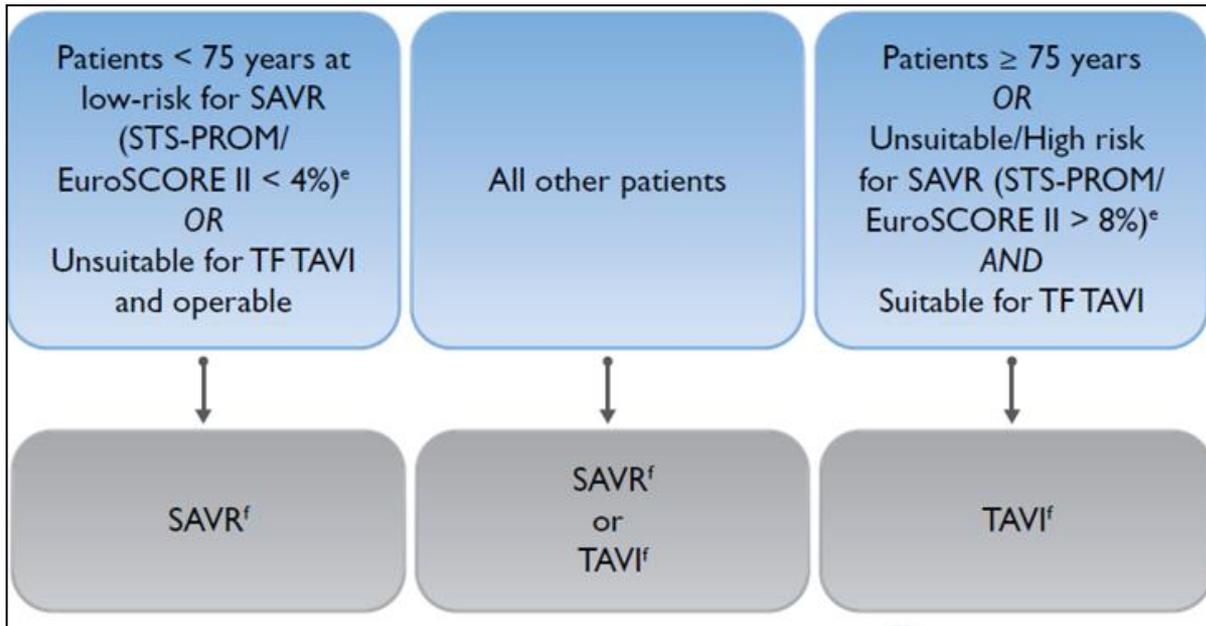
MCP: 15%

Vasc: 12%

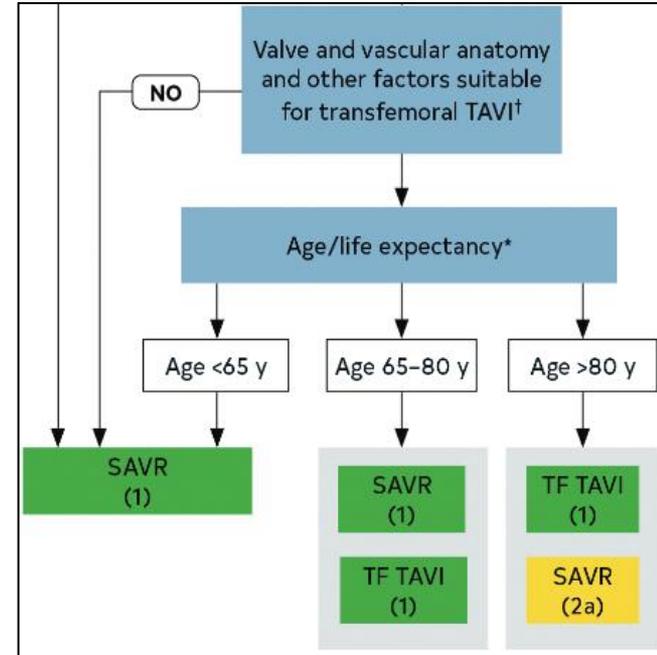
Coronaria: 0,3%

TAVI

Indicaciones



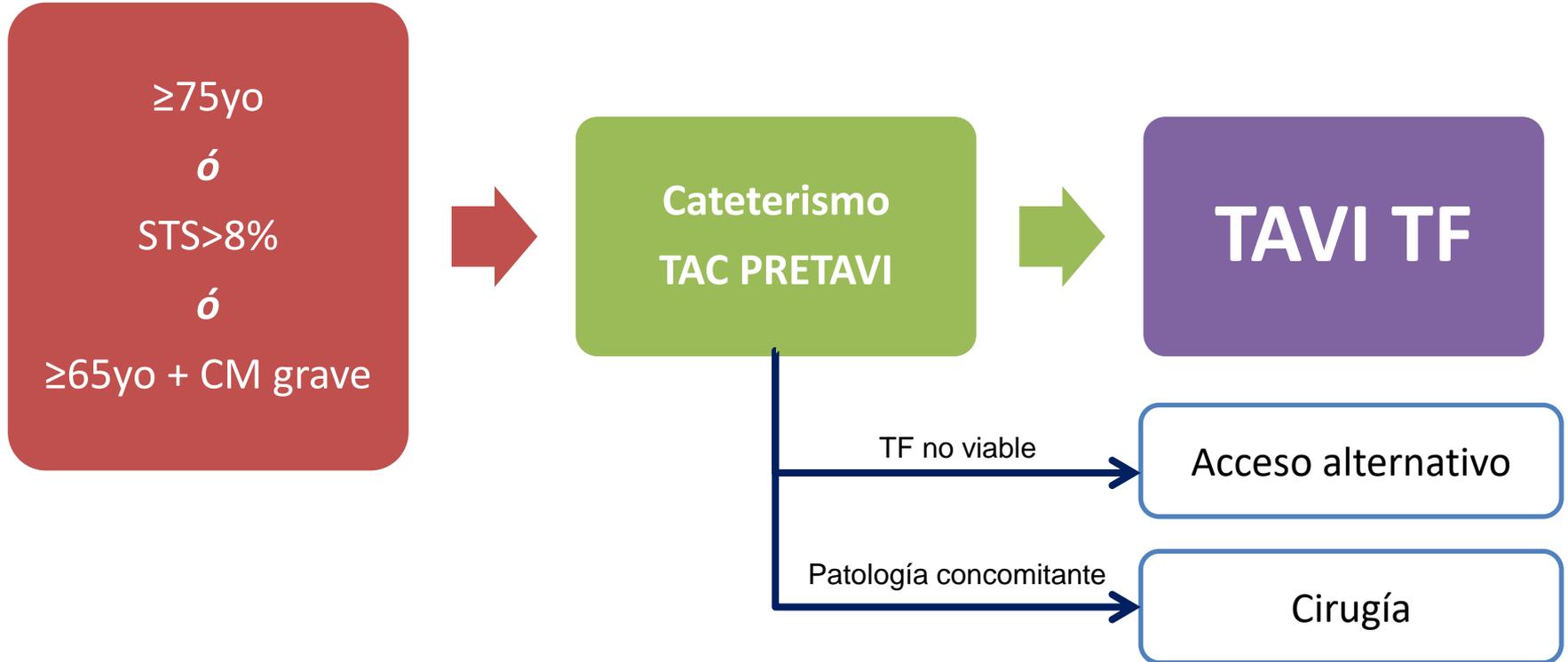
ESC/EACTS 2021



ACC/AHA 2020

TAVI

Protocolo HCD



Escenarios «desafiantes»

Bicúspide

2-4% series TAVI

Durabilidad, aortopatía,
riesgo anillo v. IAo

<sobredimensión

Anular v. Intercomisural

Valve-in-Valve

Más: Oclusión coronaria (hs 6%), ictus y mismatch

Menos: Leak y marcapasos

BASILICA, fracturing
TAVI-in-TAVI más complejo

IAo pura

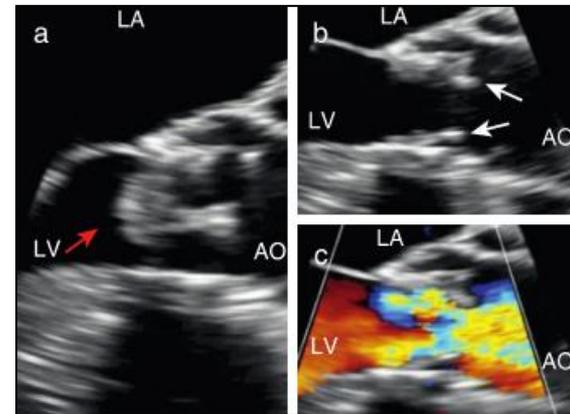
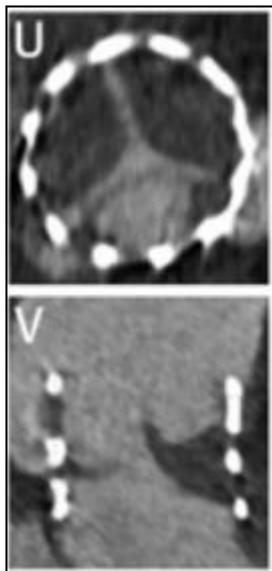
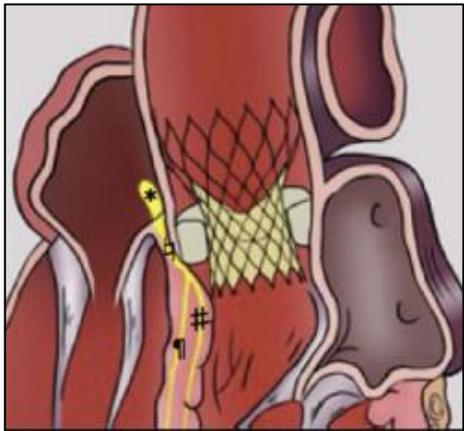
Compatibilidad con
tamaño aorta y anillo

Más embolización,
2ª válvula y leak residual

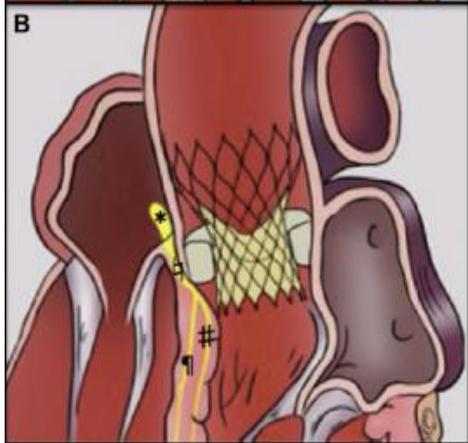
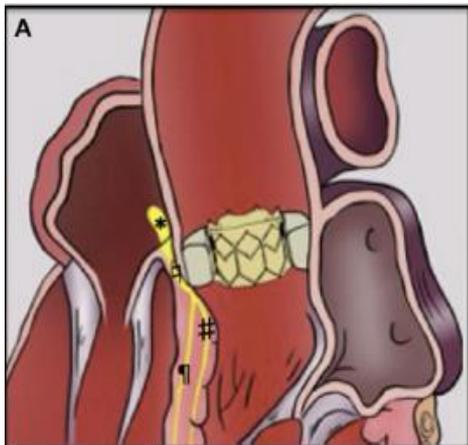
Importancia estabilización
en implante

TAVI

Seguimiento postimplante



Seguimiento postimplante

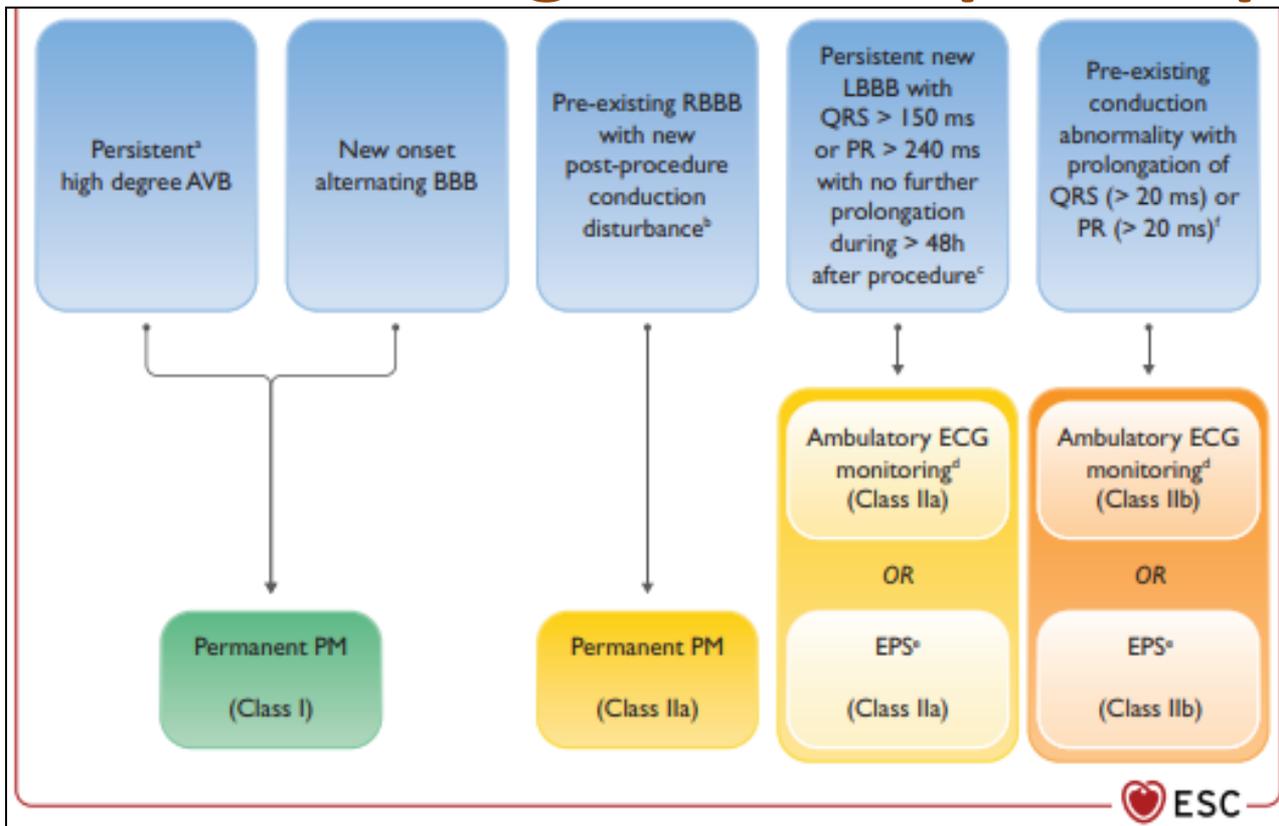


±10% MP con BEV
MP tras BRI

±20% MP con Evolut
BRI con BEV

±30% BRI con Evolut

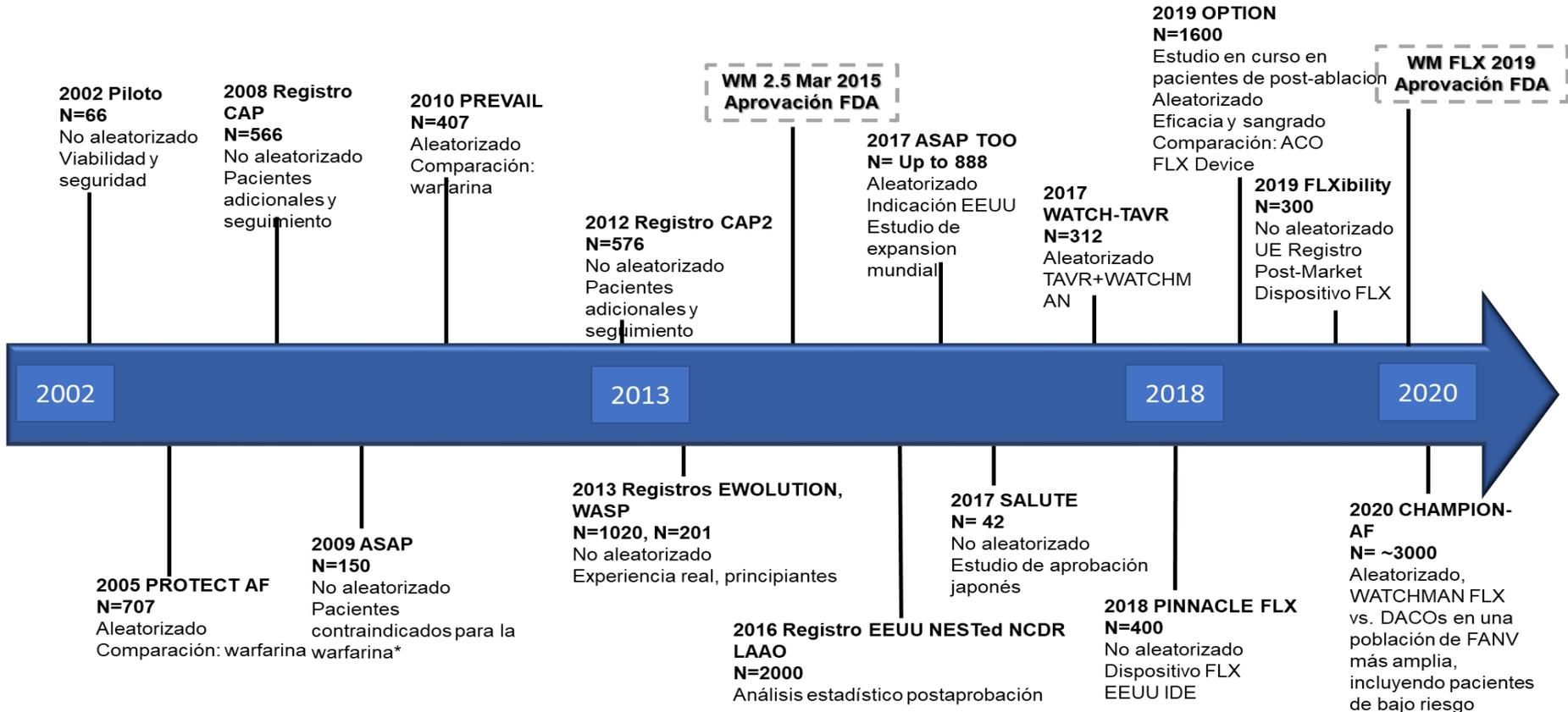
Seguimiento postimplante



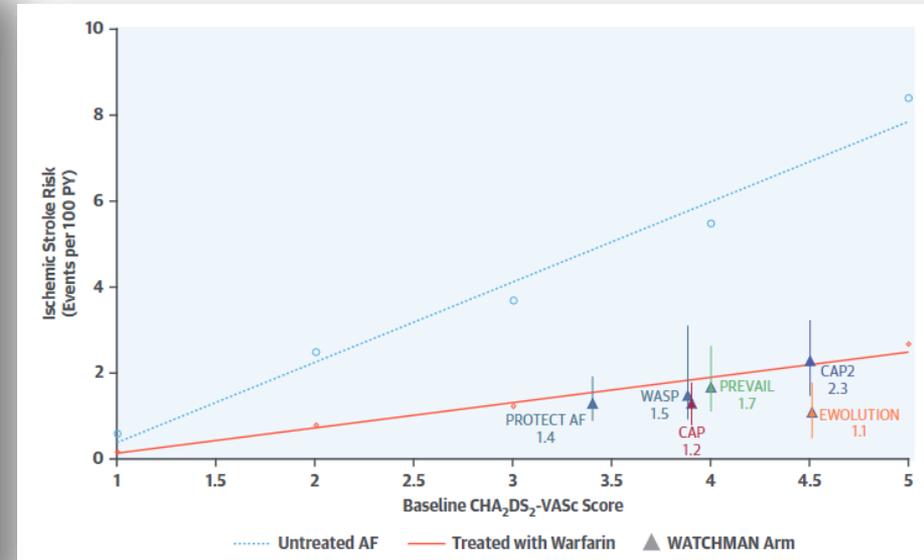
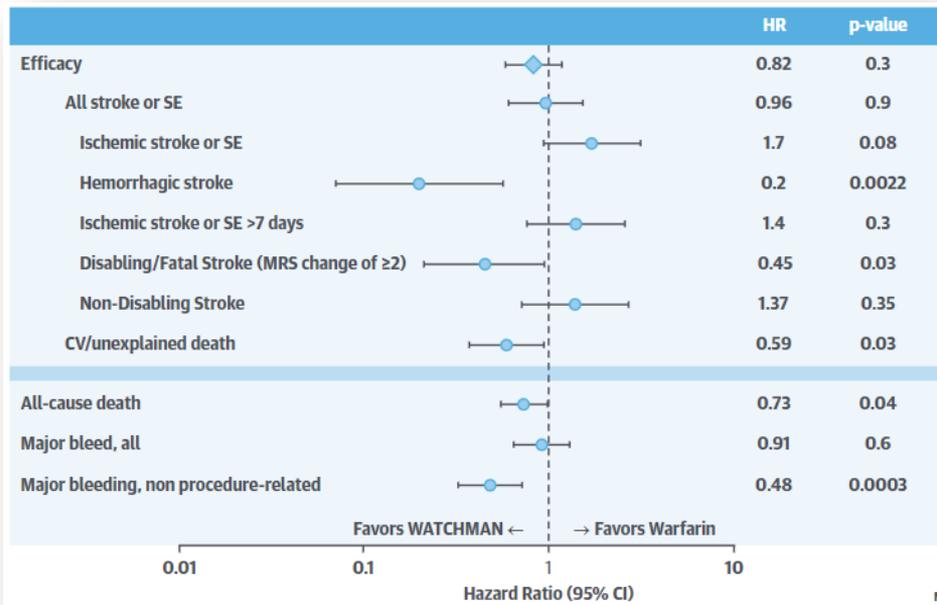
Intervencionismo Estructural

- Valvulopatías:
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Estudios clínicos Watchman



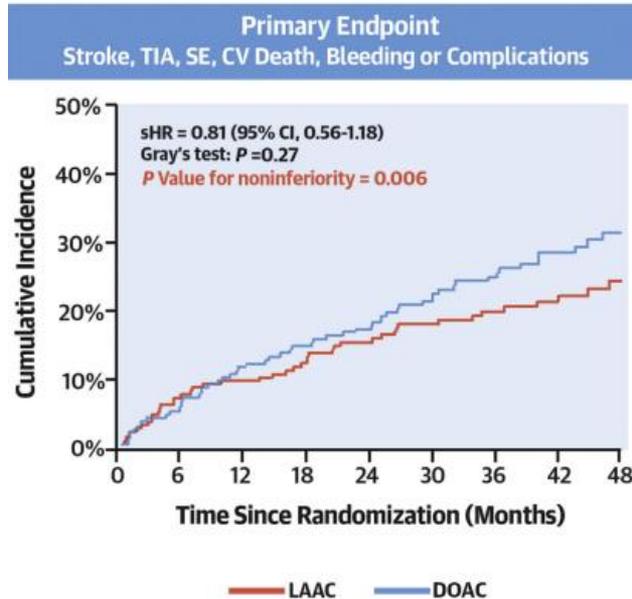
Estudios clínicos v. AVK



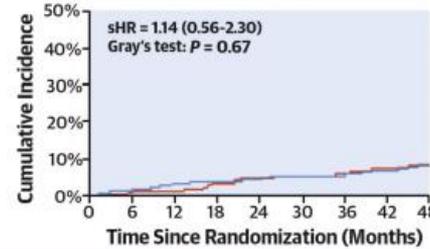
ACODS ≠



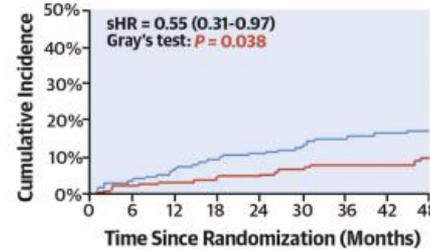
PRAGUE-17 (v. Apixaban)



Stroke or TIA



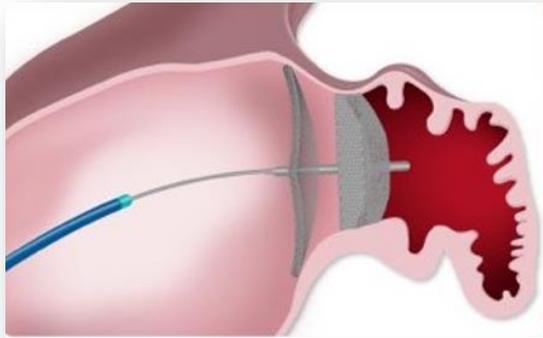
Non-Procedural Clinically Relevant Bleeding



LAAC

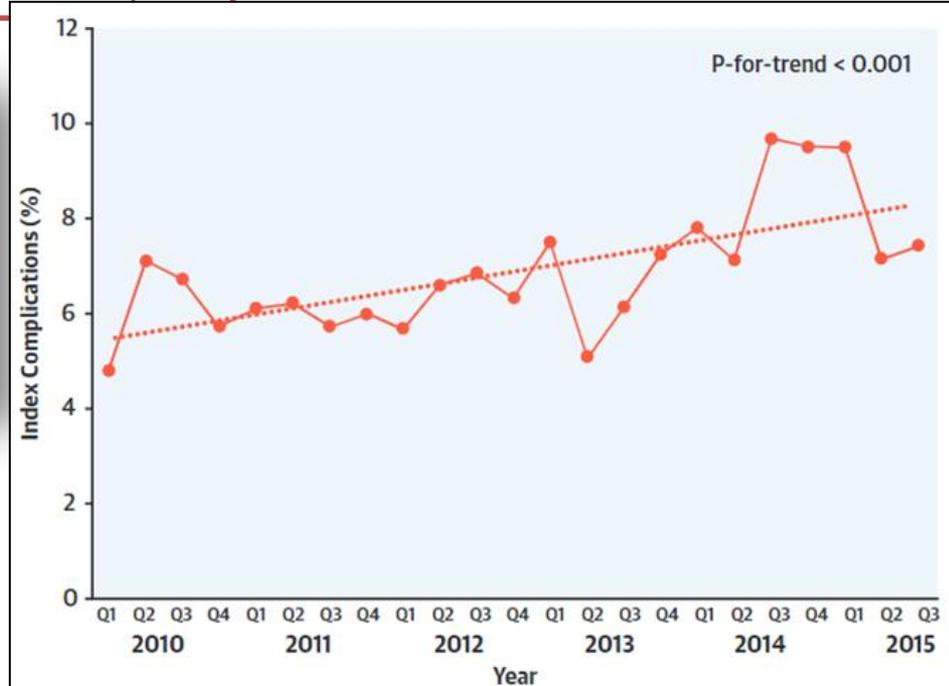
Amulet IDE

n=1878
CHA2DS2VASc = 4.5/4.7



Cierre	98,9%
Complicación	4,5%
Ictus/ES 18m	2,8%

Lakkireddy D



Risk of Mortality Following Catheter Ablation of Atrial Fibrillation



ELSEVIER

Contents lists available at ScienceDirect

IJC Heart & Vasculature

journal homepage: www.sciencedirect.com/journal/ijc-heart-and-vasculature

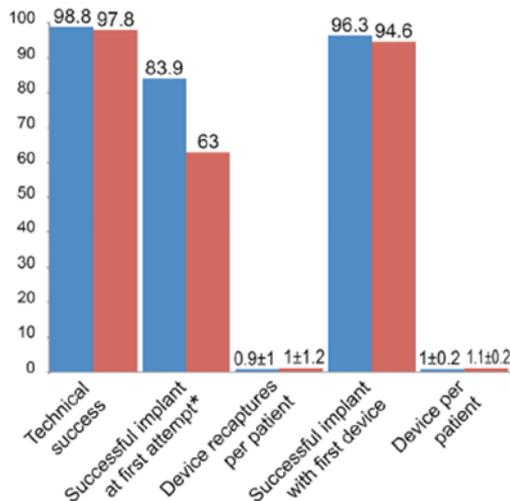


Impact of operators' experience on *peri*-procedural outcomes with Watchman FLX: Insights from the FLX-SPA registry²

Ignacio Cruz-González^{a,b,1}, Francisco Torres Saura^{c,1}, Blanca Trejo-Velasco^{a,*}, José Antonio Fernández Díaz^d, Ricardo Fajardo Molina^e, Raquel del Valle-Fernández^f, Gerardo Moreno Terribas^{g,h}, David Martí Sánchez^{i,j}, José-Ramón López-Mínguez^{k,l},



92 (26%) ≤10 Watchman FLX implants
267 (74%) >10 Watchman FLX implants



P>0.05 for all comparisons except *p<0.001

First generation percutaneous left atrial appendage closure device



Large size range and shorter device



Next generation percutaneous left atrial appendage closure device



Distal tines folded back



Greater number of struts



Dual-row anchors



Reduced metal exposure



LAAC

Indicaciones

EHRA/EAPCI 2020

Patients with an indication for stroke prevention due to atrial fibrillation

Suitable for OAC

Elevated bleeding risk

- Patients with
1. HAS-BLED ≥ 3
 2. Elevated bleeding risk outside HAS-BLED-Score, e.g., tumour, thrombocytopaenia
 3. Need for prolonged or repetitive triple therapy, e.g., severe CAD and stenting
 4. Renal failure (severe) as contraindication to NOAC

- Patients with individual and specific risk constellation for stroke
1. Inefficient OAC: "stroke on warfarin"
 2. Electrically isolated LAA post ablation (indication for LAA occlusion controversial)

Patient unwilling or unable to take OAC

Contraindication to oral anticoagulation

Advise NOAC

NOAC

Individual risk-benefit analysis of OAC vs LAA occlusion

OAC
(NOACs/Vit-K-antagonists)

*Note: In case of strict contraindication to antiplatelet therapy, patient may not be eligible for LAA occluder implantation but for epicardial LAA occlusion or thorascopic LAA clipping.

LAA occlusion*
(may require antiplatelet therapy)

Recommendations for occlusion or exclusion of the LAA

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).^{448,449,481,482}

IIb

B

ESC/EACTS 2020

Protocolo HCD

Cualquier sangrado intracraneal

ó

Sangrado con antiXa **correctamente**
dosificado

ó

ACV con NACO **correctamente**
dosificado

ó

Evento con **FG <50 mL/min**

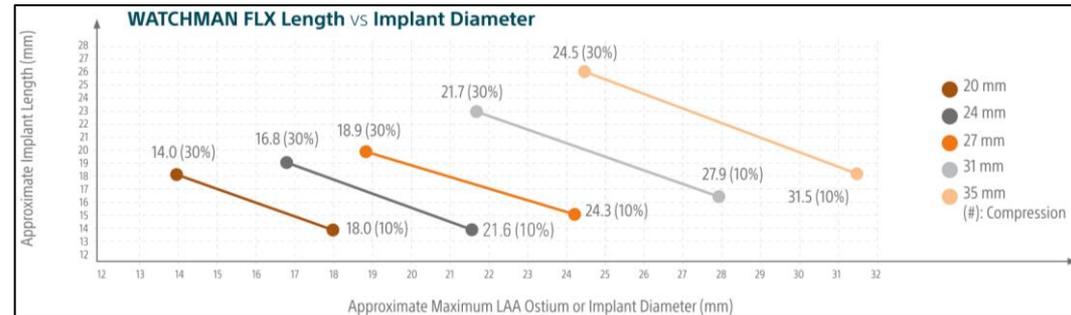
ó

Necesidad **antiagregación**
concomitante



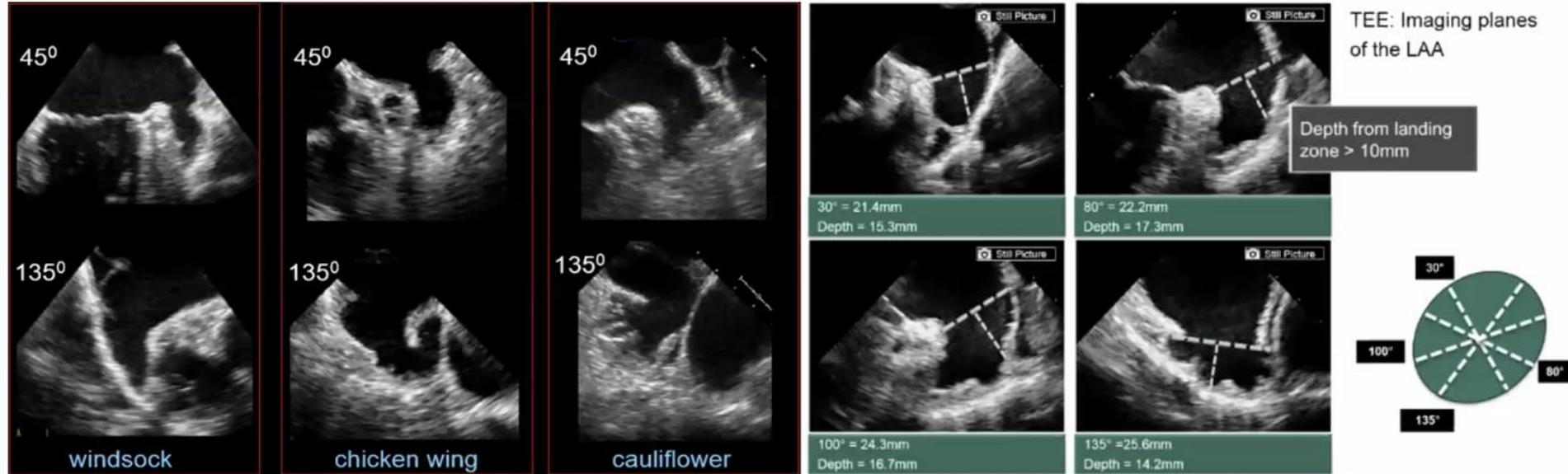
ETE (14-31mm)

Al menos exponer alternativa



LAAC

Protocolo HCD

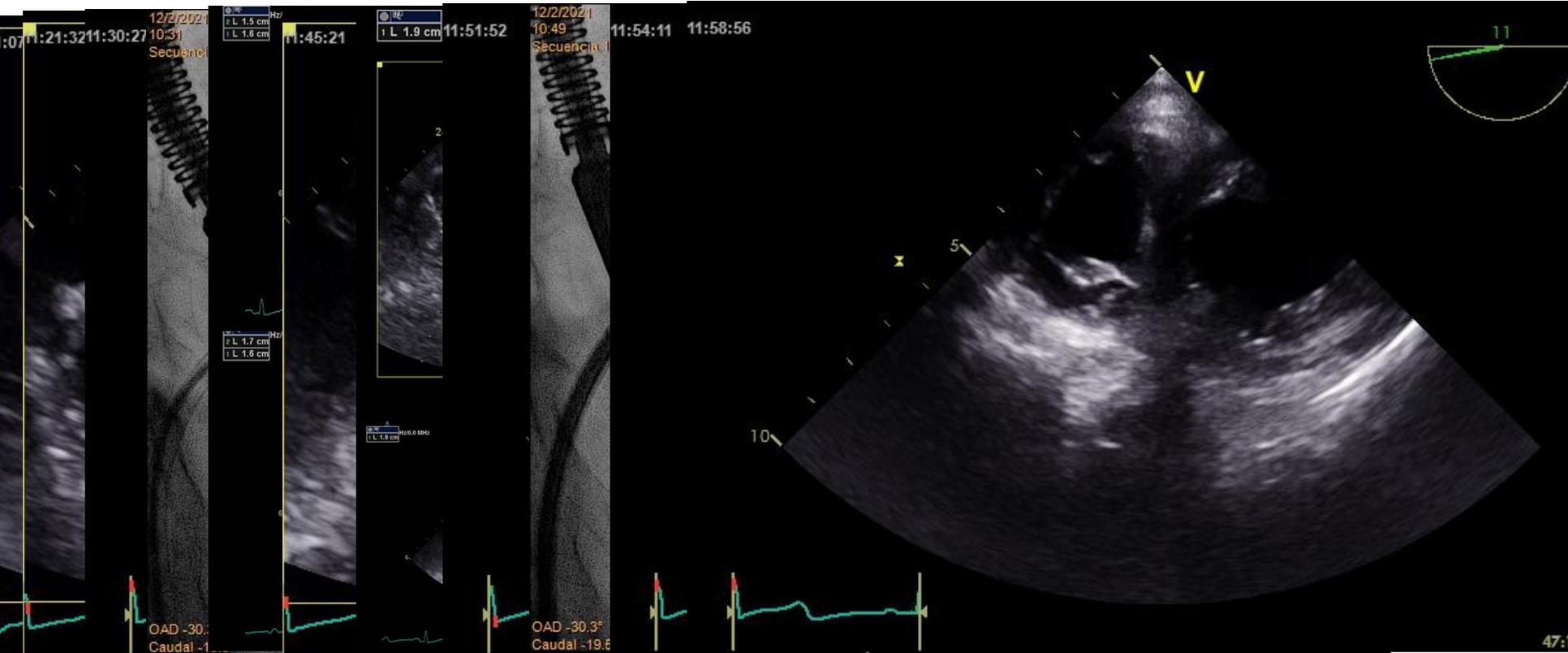


Determinar: Profundidad <10-15mm o tamaño exagerado

45°: No veo profundidad // **135°:** Pierdo referencia ostium

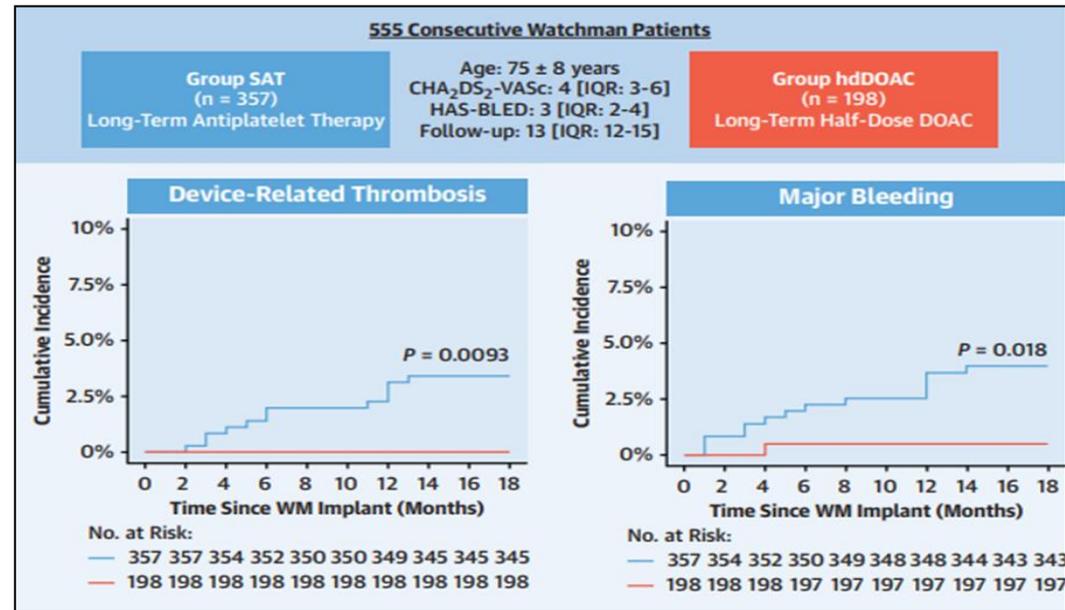
LAAC

Procedimiento



Seguimiento postimplante

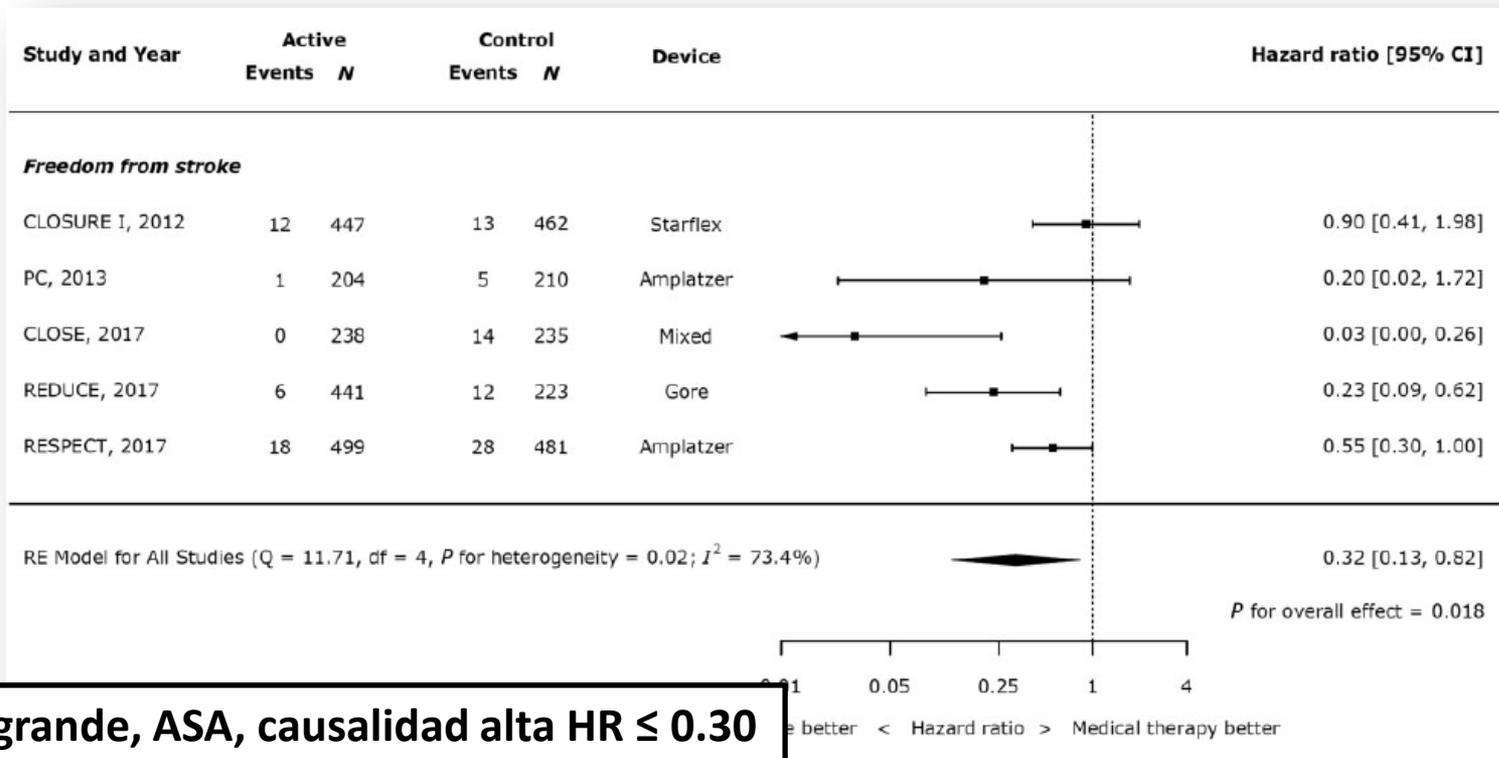
- ETE mandatorio 45 días
- Gran VERSATILIDAD
 - TAO v. DAP 45 días
 - SAP posteriormente (v. dosis media NACO)
 - Eventualmente no TAT



Intervencionismo Estructural

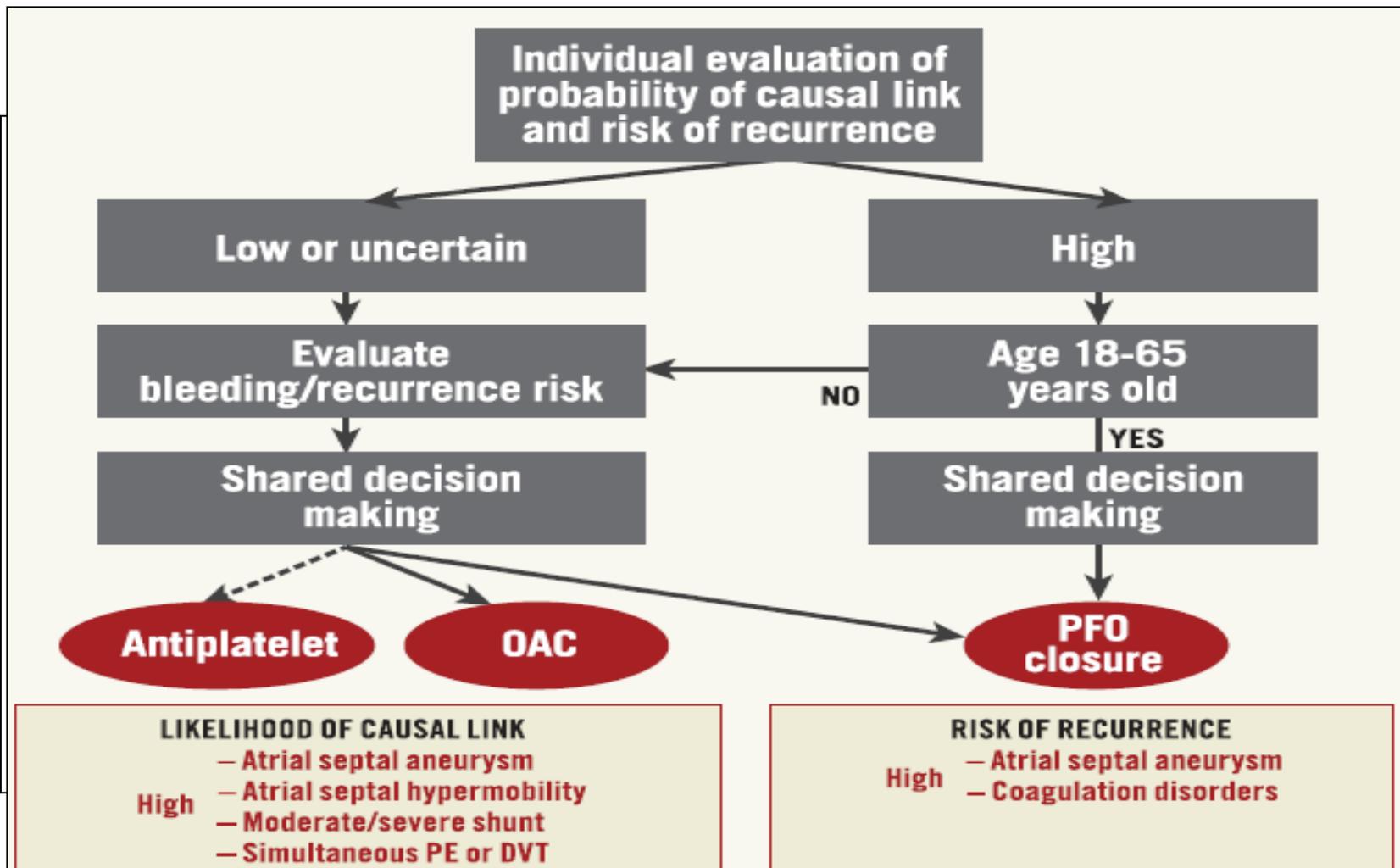
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Estudios clínicos



Shunt grande, ASA, causalidad alta $HR \leq 0.30$

Shunt mediano, causalidad media $HR \approx 0.50$



Practice advisory update summary: Patent foramen ovale and secondary stroke prevention

Report of the Guideline Subcommittee of the American Academy of Neurology

Steven R. Messé, MD, Gary S. Gronseth, MD, David M. Kent, MD, MSc, Jorge R. Kizer, MD, MSc, Shunichi Homma, MD, Lee Rosterman, DO, John D. Carroll, MD, Koto Ishida, MD, Navdeep Sangha, MD, and Scott E. Kasner, MD, MSCE

Neurology® 2020;94:876-885. doi:10.1212/WNL.0000000000009443

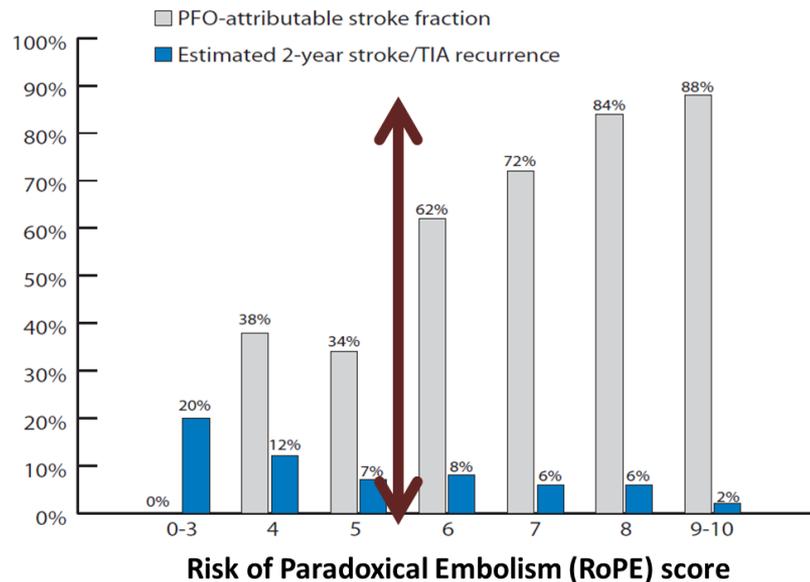
Correspondence
American Academy of
Neurology
guidelines@aan.com

Statement 2a

In patients younger than 60 years with a PFO and an embolic-appearing infarct and no other mechanism of stroke identified, clinicians may recommend closure following a discussion of potential benefits (reduction of stroke recurrence) and risks (procedural complication and atrial fibrillation) (level C).

Statement 2c

PFO closure may be offered in other populations, such as for a patient who is aged 60–65 years with a very limited degree of traditional vascular risk factors (i.e., hypertension, diabetes, hyperlipidemia, or smoking) and no other mechanism of stroke detected following a thorough evaluation, including prolonged monitoring for atrial fibrillation (level C).



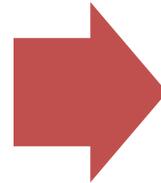
FOP

Protocolo HCD

Primer
ictus/AIT/embolismo
coronario o periférico:

RoPE>6

RoPE=6 criterio de riesgo
(paso severo ETT/DTC, variantes
anatómicas, trombofilia, riesgo
recurrencia ETEV)

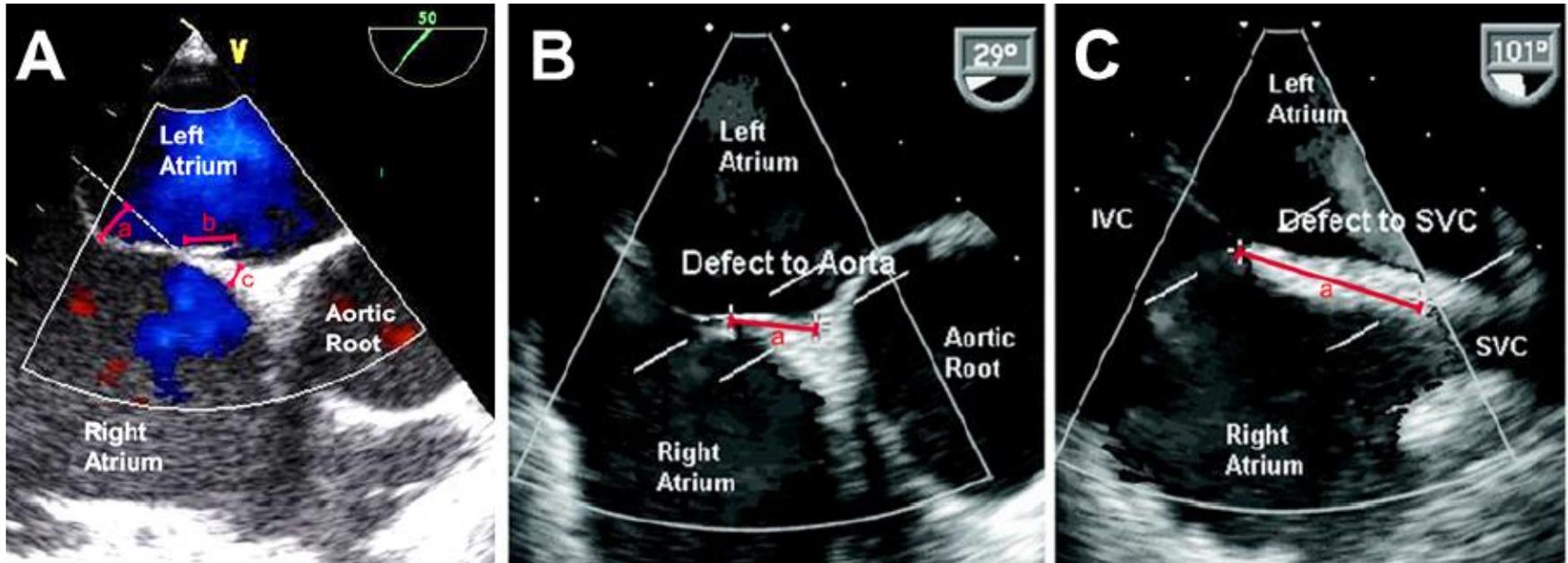


ETE

Consensuar con neurología

FOP

Protocolo HCD



ASA ($\geq 10\text{mm}$), tunel ($\geq 10\text{mm}$), grosor SS ($\geq 10\text{mm}$)
ASA prominente ($\geq 20\text{mm}$) ó Hipertrofia lipomatosa ($\geq 15\text{mm}$)
CIA asociada

FOP

Procedimiento



Seguimiento postimplante

- **Complicaciones:** leves e infrecuentes
 - Riesgo FA: $\pm 5\%$ a 5 años, mayoría sin TAO crónico
 - Vasculares $< 1\%$
 - Erosión, embolización: anecdótica con ECO
- **Manejo tras el alta:**
 - **Clopidogrel** 1-6 meses (en nuestro centro 1 mes)
 - **Aspirina** 1-5 años (a criterio neurología)
 - **Profilaxis endocarditis y Eco burbujas** en 6 meses → **ALTA**