

Manažment FP v špecifických klinických situáciách



Konflikt záujmov

Forma finančného prepojenia	Spoločnosť
Participácia na klinických sledovaniach/firemnom grante	nie
Nepeňažné plnenie (v zmysle zákona)	nie
Prednášajúci	nie
Akcionár	nie
Konzultant/odborný poradca	nie
Ostatné príjmy (špecifikovať)	nie

Manažment FP v špecifických klinických situáciách

1. FP u pacienta po KCH výkone a nekardiálnej OP
2. FP u onkologického pacienta
3. FP u pacienta po gastrointestinálnom krvácaní
4. FP u pacienta po iCMP a hemoragickej CMP
5. FP u fragilného pacienta

Odporúčania sa uvedeným
klinickým situáciám **takmer/
vôbec** nevenujú...

FP u pacienta po KCH výkone a nekardiálnej OP

Odporúčania pre FP z r. 2020

Odporúčania	Trieda	Úroveň
Perioperačná liečba amiodarónom alebo betablokátormi sa odporúča na prevenciu pooperačnej FP po kardiochirurgickom zákroku.	I	A
Dlhodobá OAK na prevenciu TE príhod by sa mala zvážiť u pacientov s pooperačnou FP s rizikom CMP po nekardiálnej chirurgii vzhľadom na očakávaný klinický prínos OAK a pri preferencii pacienta.	IIa	B
Dlhodobá OAK na prevenciu TE príhod by sa mohla zvážiť u pacientov s pooperačnou FP s rizikom CMP po KCH operácii vzhľadom na očakávaný klinický prínos OAK a pri preferencii pacienta.	IIb	B

Odporúčania nezohľadňujú:

1. Dĺžku trvania FP
2. Dilatáciu ĽP, štrukturálne ochorenie srdca
3. Typ KCH výkonu.

Zohľadňujú len riziko tromboembolizmu.

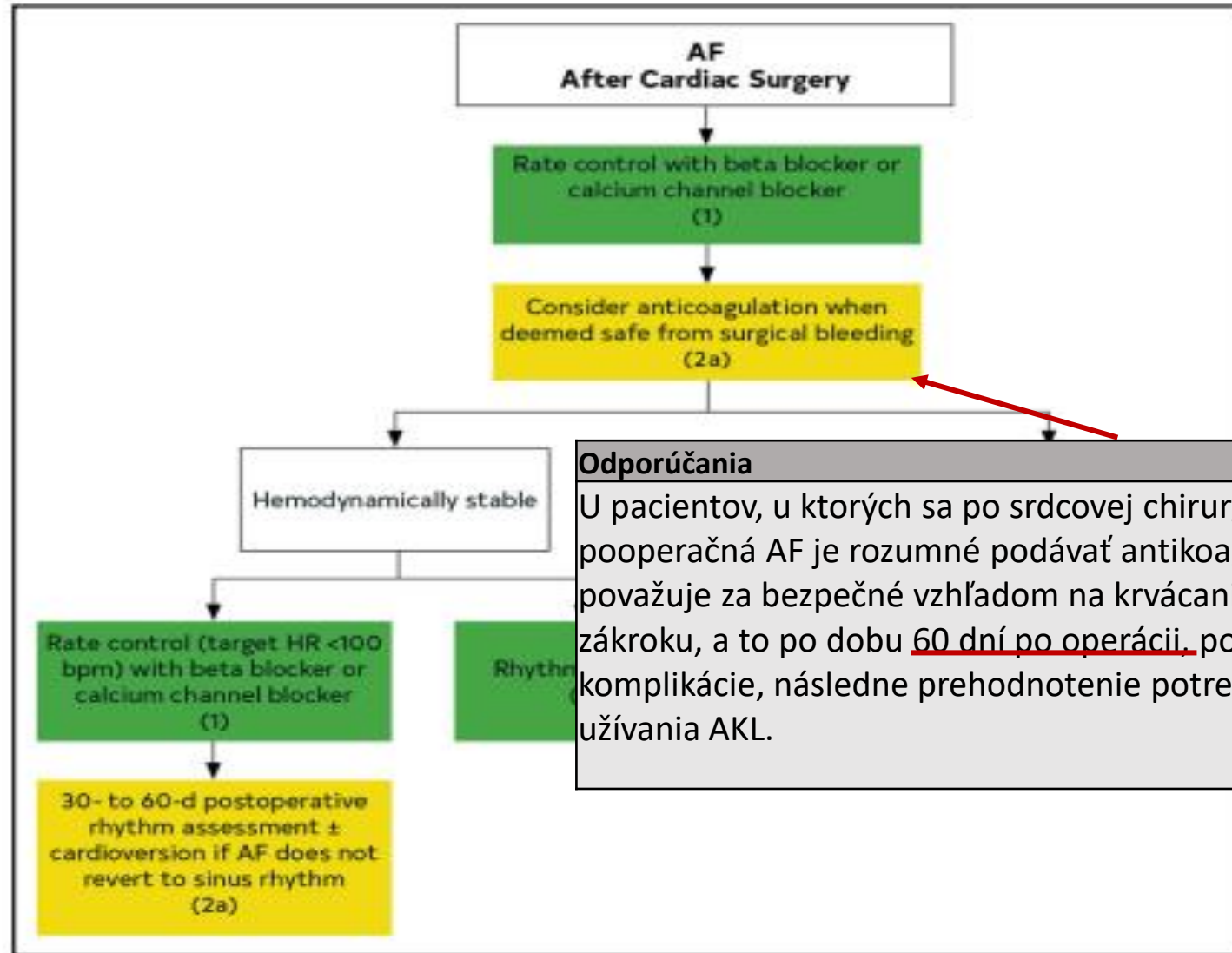
Odporúčania pre FP z r. 2024

Odporúčania	Trieda	Úroveň
Perioperačná liečba amiodarónom sa odporúča k zabráneniu POAF po KCH OP*	I	A
K zabráneniu POAF by sa mala počas KCH výkonu vykonať sprievodná zadná perikardiotómia	IIa	B
Dlhodobú AKL je potrebné zvážiť u pacientov s POAF po KCH výkone a nekardiálnej chirurgii pri zvýšenom TE riziku	IIa	B
Rutinné používanie BB za účelom prevencie POAF po nekardiálnej OP sa neodporúča	III	B

* kumulatívna dávka 3000 mg

Odporúčania	Trieda	Úroveň
Skóre CHA2DS2-VA 2 alebo viac sa odporúča ako indikátor <u>zvýšeného</u> TE rizika pre rozhodnutie o začatí perorálnej antikoagulácie.	I	A
Skóre CHA2DS2-VA 1 by sa malo považovať za indikátor <u>zvýšeného</u> TE rizika pre rozhodnutie o začatí perorálnej antikoagulácie.	IIa	C

FP u pacienta po KCH výkone

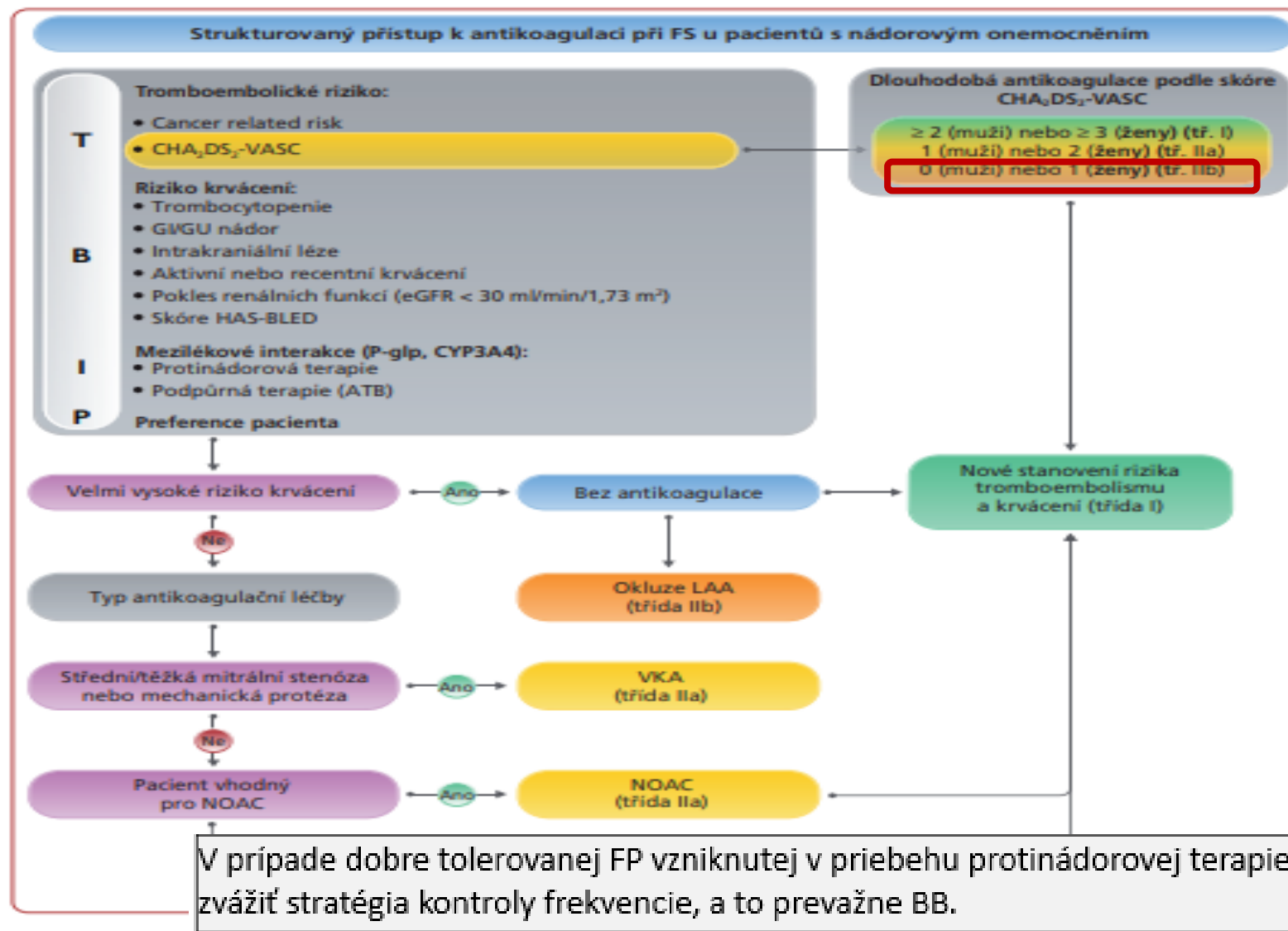


Odporúčania	Trieda	Úroveň
U pacientov, u ktorých sa po srdcovej chirurgii rozvinie pooperačná AF je rozumné podávať antikoagulanciá, keď sa to považuje za bezpečné vzhľadom na krvácanie po chirurgickom zákroku, a to po dobu <u>60 dní po operácii</u> , pokiaľ sa nevyvinú komplikácie, následne prehodnotenie potreby dlhodobého užívania AKL.	Ila	B

AKL u pacientov s POFP podľa odporúčaní

	<ul style="list-style-type: none"> American Heart Association American College of Cardiology Heart Rhythm Society <p>(2014, 2019)</p>	<ul style="list-style-type: none"> Society of Cardiovascular Anesthesiologists European Association of Cardiothoracic Anesthetists <p>(2019)</p>	<ul style="list-style-type: none"> European Society of Cardiology European Association of Cardiothoracic Surgery European Heart Rhythm Association <p>(2016, 2020)</p>	<ul style="list-style-type: none"> Canadian Cardiovascular Society Canadian Heart Rhythm Society <p>(2020)</p>
<p>Long-term anticoagulation should be considered in patients with POAF on the basis of individual stroke and bleeding risk.</p>	<p>2023 IIA (B)</p> <p>IIA (C)</p>	<p>IIA (B/C)</p>	<p>2024 IIA (B)</p> <p>IIB (B)</p> <p>"the evidence on OAC in patients with POAF is not very robust."</p>	<p>Suggest anticoagulation be held for first 72 hours for individualized risk assessment of TE event and risk of postoperative bleeding (Weak Recommendation, Low Quality of evidence)</p> <p>Reassess need for OAC at 6-12 weeks (Strong; Moderate)</p>

FP u onkologického pacienta




FP u onkologického pacienta

- u pacientov po prekonaní rakoviny v nedávnej dobe sa má systém TE CHA2DS2 VASc používať s opatrnosťou
- CHA2DS2-VASc skóre u onkologických pacientov pravdepodobne podhodnocuje ich tromboembolické riziko
- analýza súboru údajov dánskeho systému zdravotnej starostlivosti preukázala, že u pacientov s FA po prekonaní rakoviny v nedávnej dobe (< 5 rokov) s rizikom TE podľa CHA2DS2 VASc 0 – 1 bod sa počas 2 rokov preukázalo vyššie riziko iCMP a TE, než u pacientov bez rakoviny

CHA₂DS₂-VASc score and risk of thromboembolism and bleeding in patients with atrial fibrillation and recent cancer

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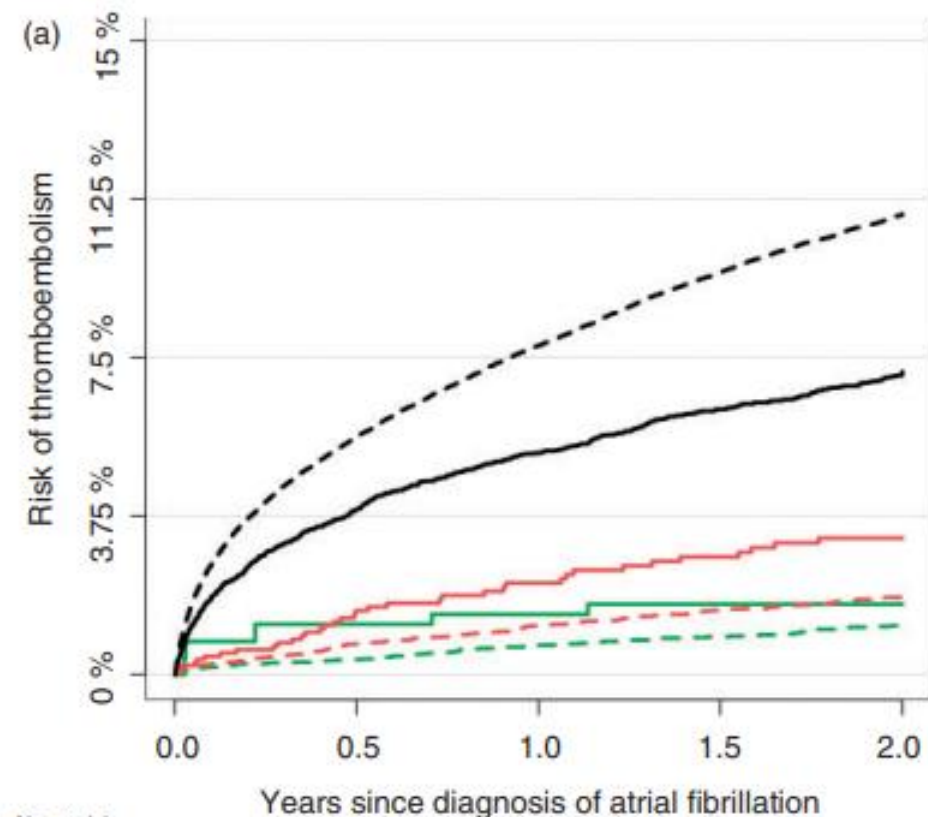
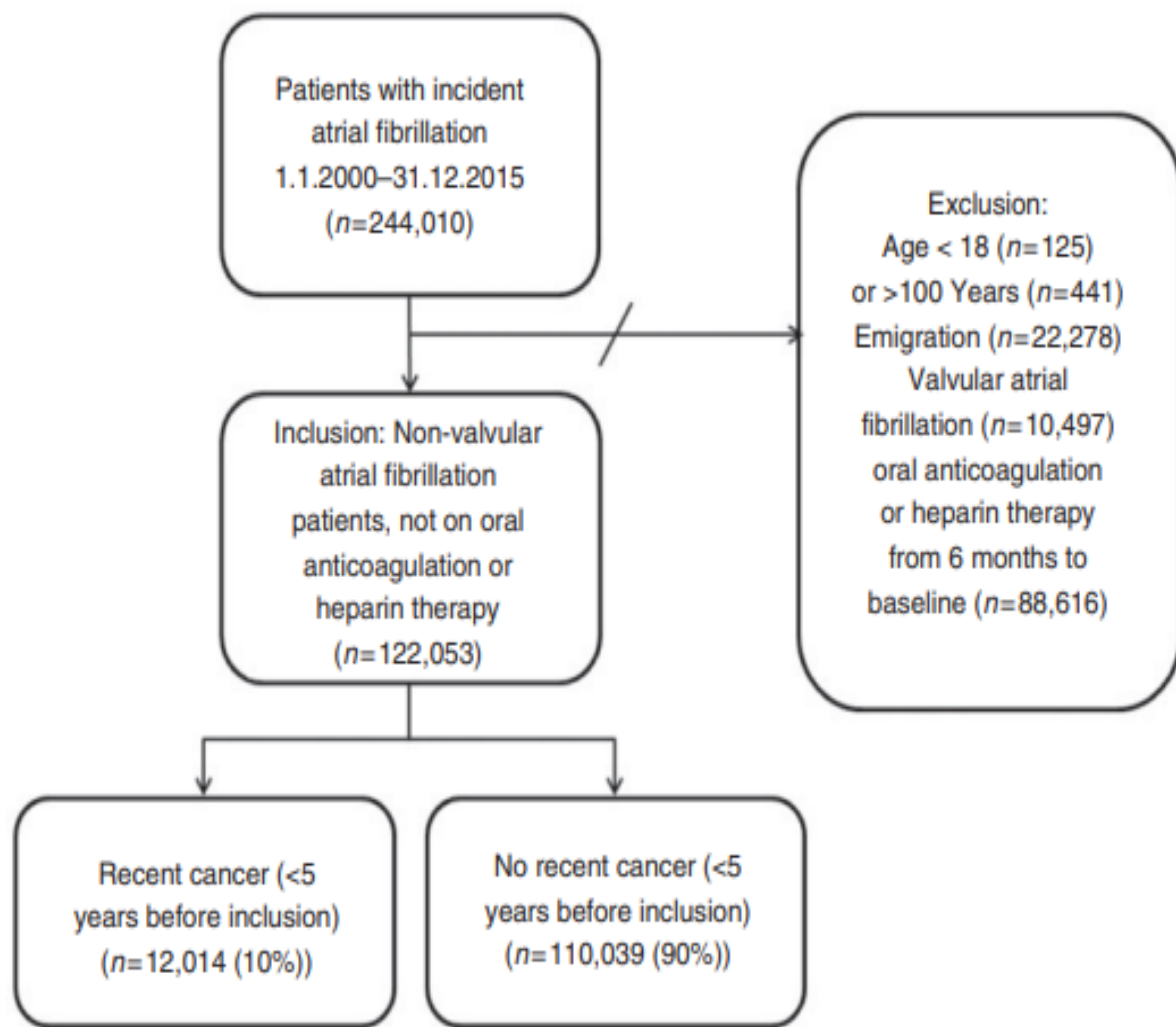
Abstract

Background: Cancer may influence the risk of thromboembolism and bleeding associated with the CHA₂DS₂-VASc score. We examined the risk of thromboembolism and bleeding associated with the CHA₂DS₂-VASc score in atrial fibrillation patients with and without recent cancer.

Methods and results: Using nationwide registers all patients diagnosed with atrial fibrillation from 2000 to 2015 and not on oral anticoagulation or heparin therapy were included and followed for 2 years. Recent cancer was defined by a cancer diagnosis 5 years or fewer earlier. Risks of thromboembolism and bleeding were estimated in cumulative incidence curves and Cox regression models. We included 122,053 patients with incident atrial fibrillation, 12,014 (10%) had recent cancer. The 2-year cumulative incidence of thromboembolism and bleeding in patients with versus without recent cancer was 1.7% (95% confidence interval (CI) 0.5–2.8) and 4.3% (95% CI 2.4–6.2) versus 1.2% (95% CI 0.9–1.5) and 1.7% (95% CI 1.4–2.0) for CHA₂DS₂-VASc score 0; 3.2% (95% CI 2.2–4.3) and 4.4% (95% CI 3.2–5.6) versus 1.8% (95% CI 1.6–2.1) and 3.0% (95% CI 2.7–3.3) for CHA₂DS₂-VASc score 1; and 7.1% (95% CI 6.6–7.7) and 6.8% (95% CI 6.3–7.2) versus 10.9% (95% CI 10.7–11.1) and 6.2% (95% CI 6.1–6.4) for CHA₂DS₂-VASc score 2 or greater. Although the CHA₂DS₂-VASc score was associated with thromboembolism and bleeding in both patients with and without cancer, the association differed between the groups for thromboembolism (test for interaction, $p < 0.001$) and bleeding (test for interaction, $p < 0.001$).

Conclusion: The association of the CHA₂DS₂-VASc score and risk of thromboembolism and bleeding differed between atrial fibrillation patients with and without recent cancer. Therefore, the CHA₂DS₂-VASc score should be used with caution in patients with recent cancer.

Metodika štúdie a výsledky



	No. at risk				
	0.0	0.5	1.0	1.5	2.0
CHA ₂ DS ₂ -VASc 0, no recent cancer:	8595	7227	6571	6053	1368
CHA ₂ DS ₂ -VASc 0 and recent cancer:	513	303	223	185	36
CHA ₂ DS ₂ -VASc 1, no recent cancer:	12309	9725	8690	7890	1674
CHA ₂ DS ₂ -VASc 1, and recent cancer:	1419	763	562	456	86
CHA ₂ DS ₂ -VASc 2–9, no recent cancer:	89135	57494	46343	38462	6754
CHA ₂ DS ₂ -VASc 2–9 and recent cancer:	10082	4996	3627	2884	522

FP u pacienta po gastrointestinálnom krvácaní

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Management dilemmas in restarting anticoagulation after gastrointestinal bleeding

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ABSTRACT

Systemic anticoagulants are widely prescribed to prevent and treat thromboembolism, among other indications. A common complication of using these agents is gastrointestinal bleeding. While early resumption of anticoagulants after the bleeding has resolved can increase the risk of rebleeding, delayed resumption puts the patient at increased risk of thromboembolic events and mortality. There is limited data on this topic to guide clinicians on resuming anticoagulation after hospitalization for gastrointestinal bleeding and to educate patients regarding the subsequent risks of recurrent gastrointestinal bleeding, thromboembolism, and mortality. The optimal time to resume anticoagulation is also unknown. This review summarizes the existing literature and available data on the commonly encountered dilemma of restarting anticoagulation therapy after hospitalization for gastrointestinal bleeding.

Study	Design	Indication	Anticoagulant	Resumed anticoagulation (n)		Follow-up months
				Yes	No	
Qureshi 2014 ⁵	Retrospective cohort	Nonvalvular AF	Warfarin	653	676	24
Witt 2012 ²	Retrospective cohort	AF, VTE, PV	Warfarin	260	182	3
Chen 2014 ²³	Retrospective cohort	PV, AF, DVT, PE	Warfarin	22	12	n/a
Majeed 2017 ⁴	Retrospective cohort	AF, valvular heart disease, VTE	Warfarin	121	86	31
Sengupta 2018 ²⁴	Retrospective cohort	Nonvalvular AF	DOAC	586	752	3

AF indicates atrial fibrillation; DOAC, direct oral anticoagulant; DVT, deep vein thrombosis; PE, pulmonary embolism; PV, prosthetic heart valves; VTE, venous thromboembolism.

Study	Recurrent GIB		Thromboembolism		Mortality	
	Resumed	Did not resume	Resumed	Did not resume	Resumed	Did not resume
Qureshi 2014 ⁵	61/653	29/676	90/653	131/676	187/653	276/676
Witt 2012 ²	26/260	10/182	1/260	10/182	15/260	37/182
Chen 2014 ²³	6/22	0/12	0/22	2/12	Not available	
Majeed 2017 ⁴	39/121	17/86	5/121	16/86	51/121	52/86
Sengupta 2018 ²⁴	21/586	28/752	16/586	17/752	Not available	

GIB indicates gastrointestinal bleeding.

Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021

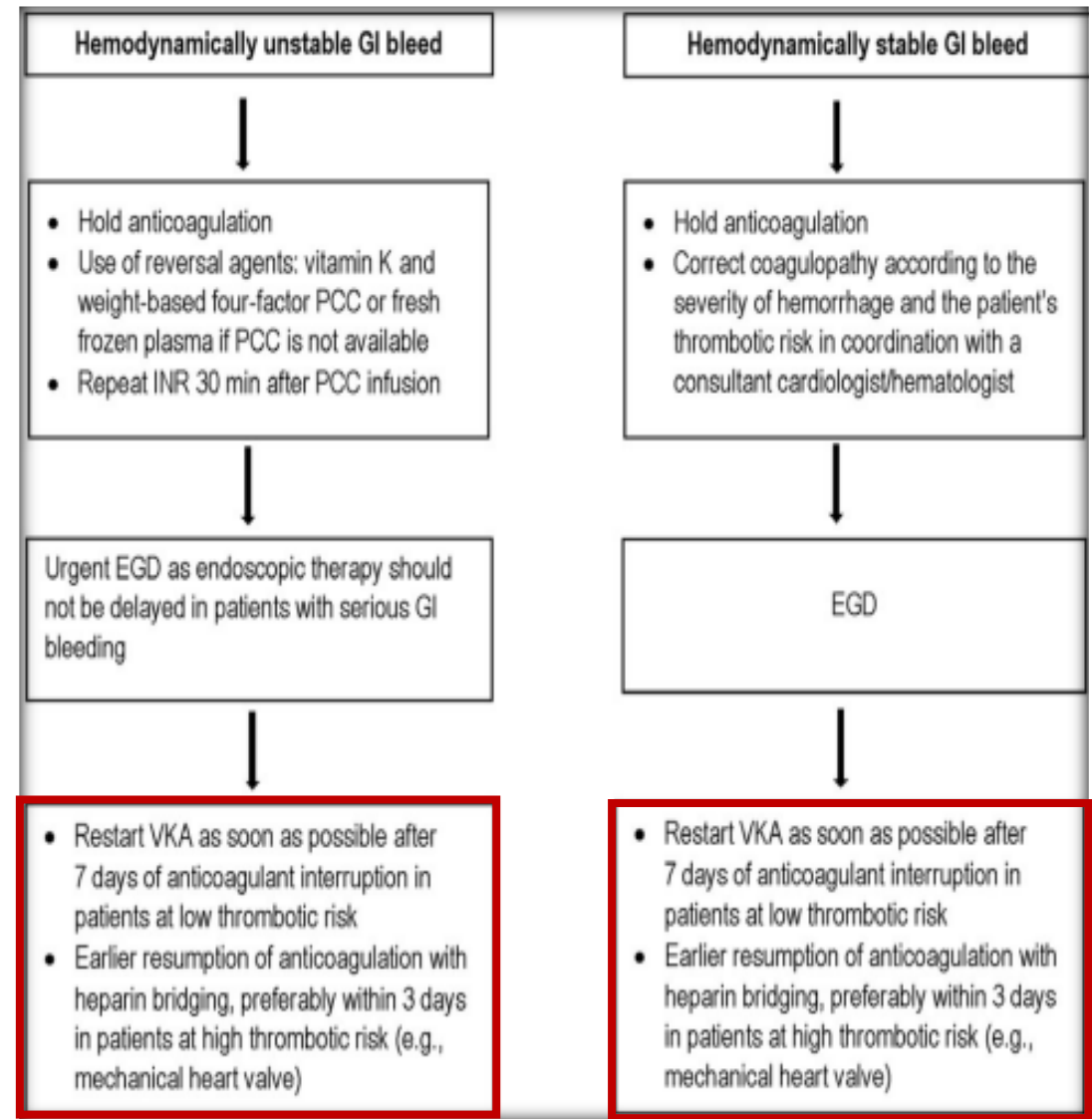
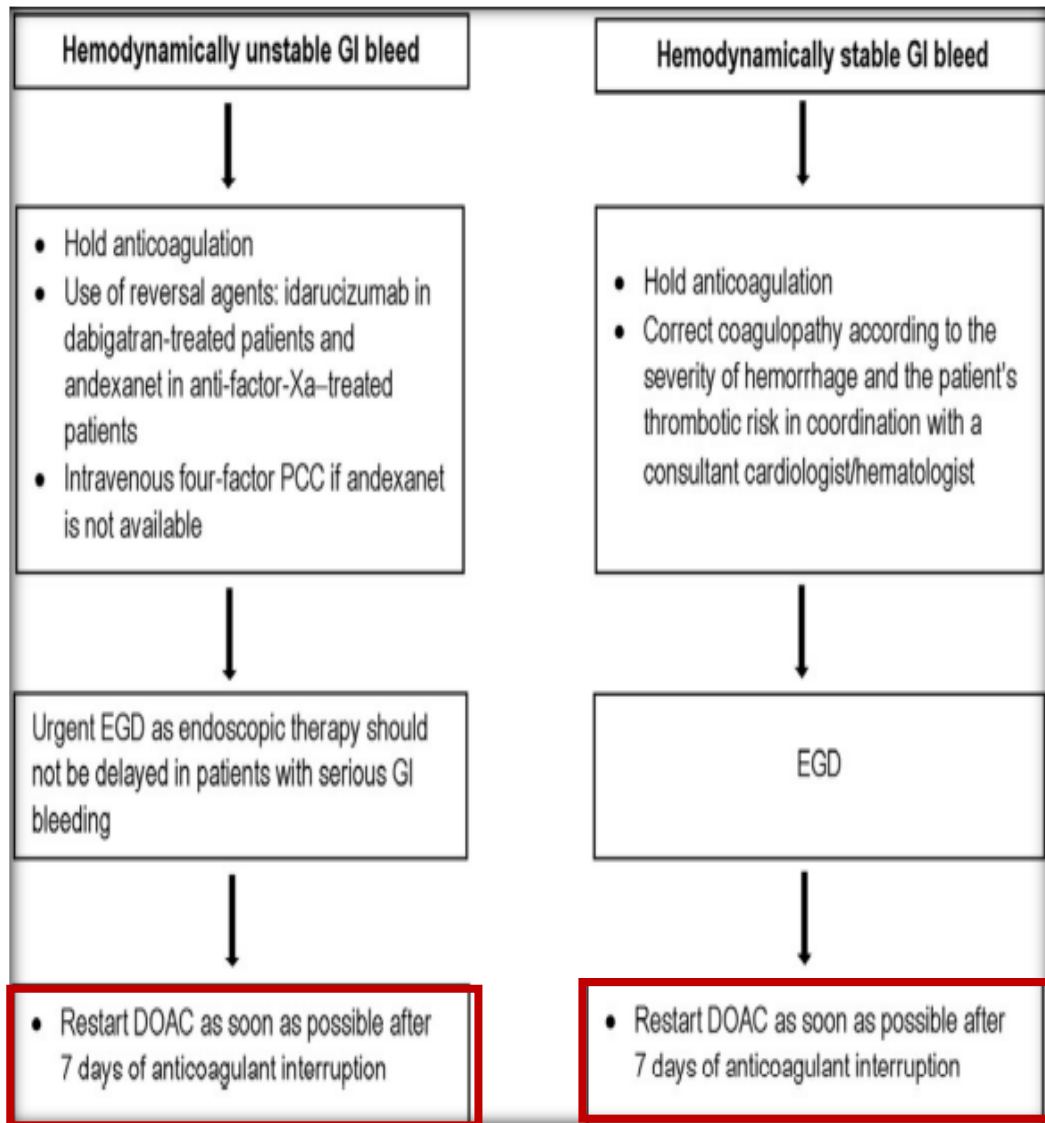


Authors

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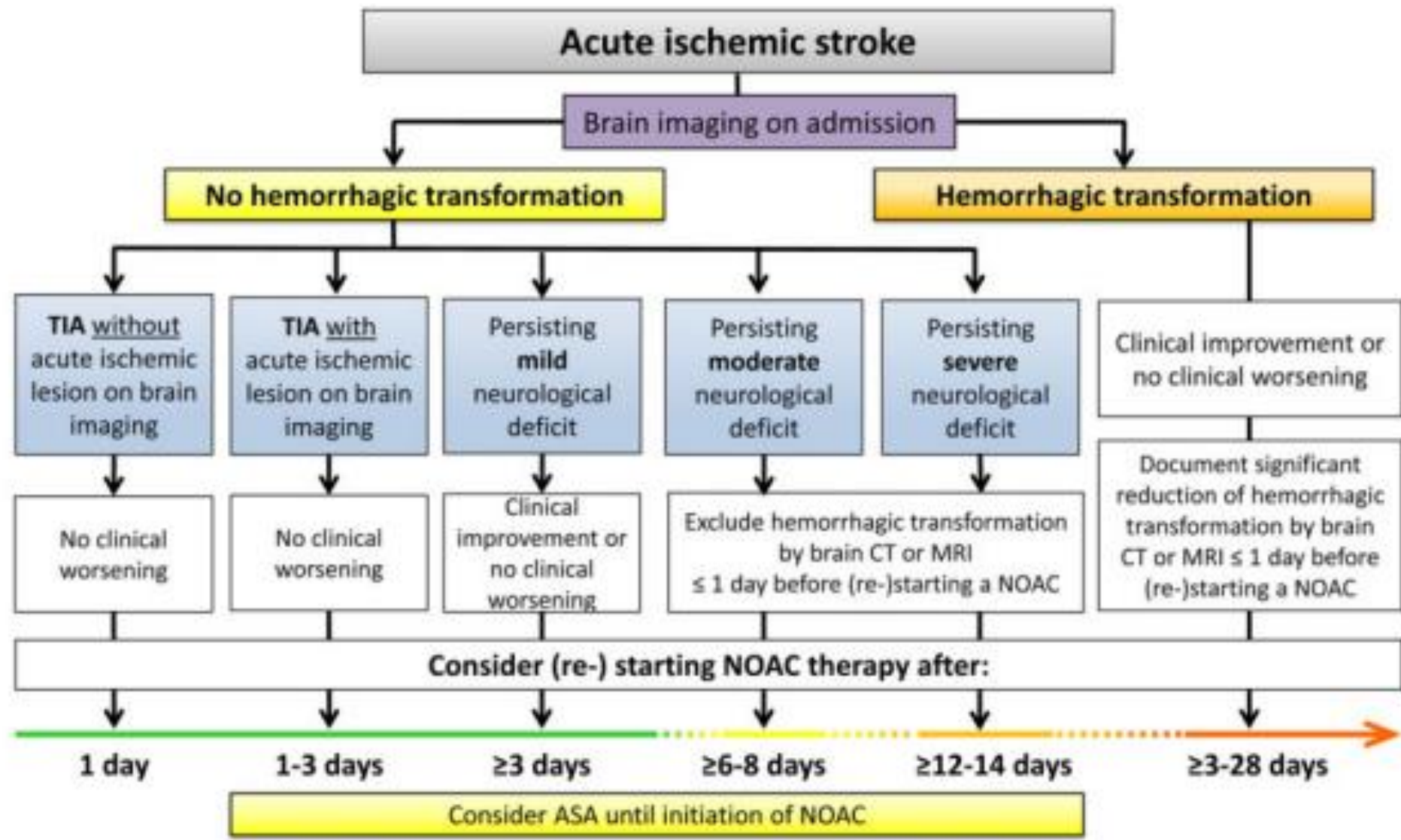
Endoscopy in patients on antiplatelet or anticoagulant therapy: British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) guideline update

Andrew M Veitch ,¹ Franco Radaelli ,² Raza Alikhan,³ Jean Marc Dumonceau,⁴ Diane Eaton,⁵ Jo Jerrome,⁶ Will Lester,⁷ David Nylander,⁸ Mo Thoufeeq,⁹ Geoffroy Vanbiervliet,¹⁰ James R Wilkinson,¹¹ Jeanin E Van Hooft¹²



FP u pacienta po iCMP a hemoragickej CMP

Odporúčania pre sekundárnu prevenciu iCMP u pacientov s FP po prekonaní akútnej iCMP	Trieda	Úroveň
U pacientov s FP s iCMP alebo TIA sa odporúča dlhodobá sekundárna prevencia CMP pomocou OAL, ak neexistuje prísna kontraindikácia použitia OAL s preferenciou NOAK pred VKA (u pacientov vhodných pre NOAK).	I	A
U pacientov s FP s akútnou iCMP sa skorá antikoagulácia (< 48 h) pomocou UFH, LMWH alebo VKA neodporúča.	III	B
Odporúčania pre prevenciu CMP u pacientov s AF po intrakraniálnom krvácaní		
<p>U pacientov s FP s vysokým rizikom iCMP (opätovné) začatie OAL s preferenciou NOAK pred VKA v prípade vhodných pacientov na NOAK je potrebné zvážiť po konzultácii s neurológom</p> <ul style="list-style-type: none"> • ICH v súvislosti s traumou • Akútna spontánna ICH (ktorá zahŕňa subdurálne, subarachnoidálne alebo intracerebrálne krvácanie) po starostlivom zvážení rizika a benefitu 	IIa	C



Based on expert opinion! No RCT data available yet

FP u pacienta po iCMP a hemoragickej CMP

ANTICOAGULATION INDICATIONS, PREFERRED TYPE OF DOAC, AND RESUMPTION OR INITIATION TIMING		
Indication	Type of Anticoagulation	Resumption or Initiation Timing ^a
Atrial fibrillation	DOAC (Eliquis) for nonvalvular AF; VKA for valvular AF	0 to 7 days for small ischemic stroke 8 to 14 days for large ischemic stroke After 2 weeks for ischemic stroke with parenchymal hematoma 2 to 6 weeks for ICH Consider LAAC for CAA
Cardiac thrombus	VKA	Within 1 week after ischemic stroke Within 2 weeks for ICH
Mechanical heart valve	VKA	Within 1 to 2 weeks after ischemic stroke Within 2 weeks for ICH
Venous thromboembolism	DOAC, VKA, or LMWH	Within 0 to 7 days for small ischemic stroke Within 8 to 14 days for large ischemic stroke Within 2 to 6 weeks for ICH IVC filter if immediate anticoagulation contraindicated
Antiphospholipid syndrome	VKA	Within 0 to 7 days for small ischemic stroke Within 8 to 14 days for large ischemic stroke Within 2 to 6 weeks for ICH
Cancer-related stroke	DOAC, LMWH	Within 0 to 7 days for small ischemic stroke Within 8 to 14 days for large ischemic stroke Within 2 to 6 weeks for ICH
Intraluminal thrombus	Heparin, DOAC, warfarin	Within 0 to 7 days for small ischemic stroke Within 8 to 14 days for large ischemic stroke
Cervical artery dissection	DOAC, warfarin, antiplatelet	Within 0 to 7 days for small ischemic stroke Within 8 to 14 days for large ischemic stroke

Abbreviations: DOAC, direct oral anticoagulation; ICH, intracranial hemorrhage; IVC, inferior vena cava; LAAC, left atrial appendage closure; LMWH, low-molecular-weight heparin; VKA, vitamin K antagonist.

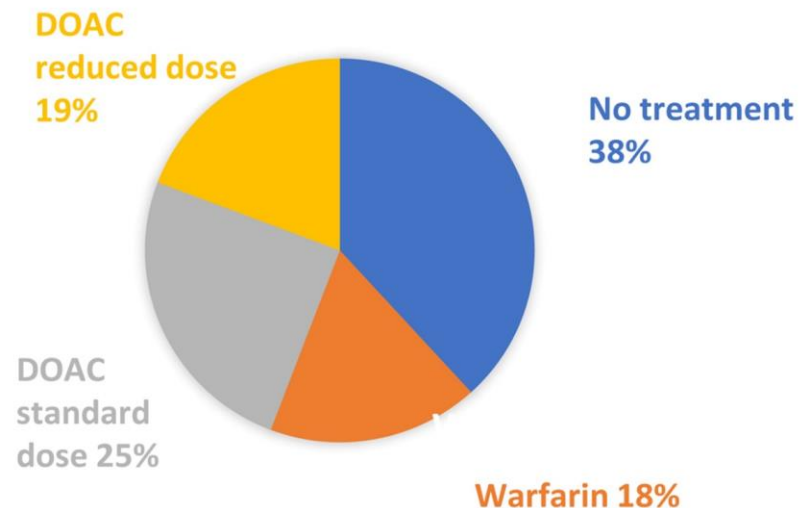
- jedno z najťažších klinických rozhodnutí
- multidisciplinárny manažment: kardiológ + neurológ
- ak nemôže byť navrátená/iniciovaná AKL → zváženie LAAO

FP u fragilného pacienta

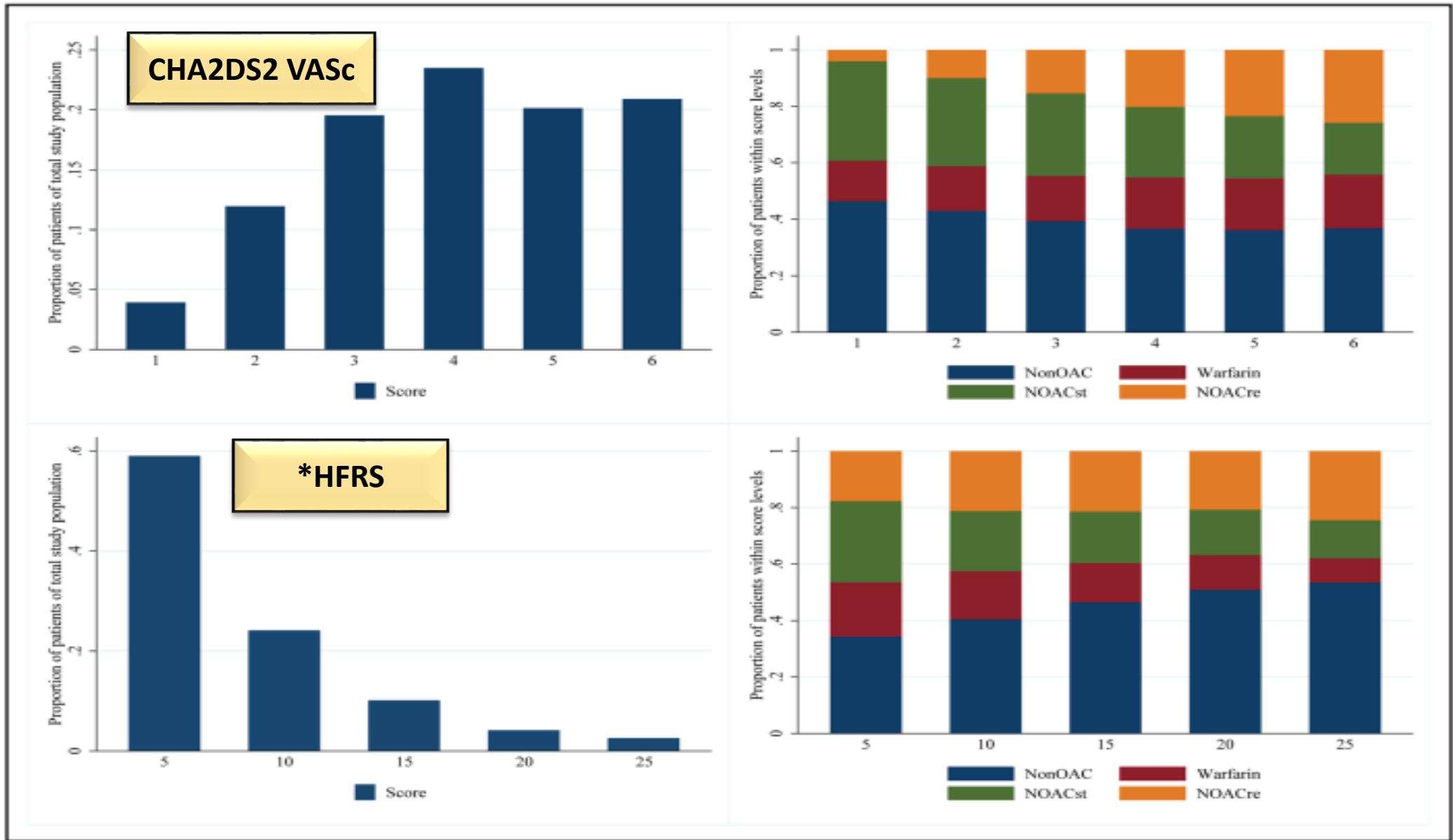
Net Clinical Benefit of Oral Anticoagulation Among Frail Patients With Atrial Fibrillation: Nationwide Cohort Study

Mette Søgaard¹, PhD; Martin Jensen², MSc; Anette Arbjerg Højen, PhD; Torben Bjerregaard Larsen, MD, PhD; Gregory Y.H. Lip³, MD; Anne Gulbech Ording⁴, PhD; Peter Brønnum Nielsen⁵, PhD

Study population of frail patients with AF
N = 36,223



- **vek:** medián 79 rokov
- 50,5 % žien
- **medián CHA2DS2 VASc:** 4
- **medián HAS BLED:** 4
- **medián skóre krehkosti:** 9,6 vs 8,5 (liečení vs neliečení)



* Hospital Frailty Risk Score

Characteristic, n (%)	No treatment	Warfarin/NOAC
Number	13 849	22 374
Female sex	50.9 (7055)	50.3 (11 250)
Age, y (IQR)	79.0 (71.0–86.0)	79.0 (72.0–86.0)
HFRS score, median (IQR)	9.6 (6.9–14.0)	8.5 (6.4–11.9)
CHA ₂ DS ₂ -VASc score, median (IQR)	4.0 (3.0–5.0)	4.0 (3.0–5.0)
HAS-BLED score, median (IQR)	3.0 (2.0–4.0)	3.0 (2.0–4.0)
Charlson score, median (IQR)	3.0 (1.0–4.0)	2.0 (1.0–4.0)
Prior stroke/SE	29.5 (4087)	31.1 (6951)
Prior major bleeding	23.8 (3294)	18.8 (4212)
Heart failure	32.0 (4431)	35.3 (7892)
Hypertension	66.9 (9269)	73.4 (16 425)
Diabetes	21.9 (3039)	21.6 (4829)
Vascular disease	22.9 (3169)	20.4 (4575)
Ischemic heart disease	33.9 (4689)	32.2 (7203)
COPD	21.2 (2935)	19.1 (4265)
Recent cancer (3 y)	19.5 (2694)	12.1 (2712)
Alcohol-related disease	9.5 (1315)	6.9 (1541)
Dementia	9.6 (1331)	6.4 (1429)

Characteristic, n (%)	No treatment	Warfarin/NOAC
eGFR, mean (SD)	63.9 (22.6)	66.1 (21.6)
eGFR 21–49	5.0 (695)	2.7 (604)
eGFR 50–90	38.4 (5316)	37.7 (8446)
eGFR >90	28.9 (4009)	30.7 (6861)
Missing	27.6 (3817)	28.9 (6460)
Medication		
Warfarin	0.0 (0)	28.4 (6355)
DOAC standard dose	0.0 (0)	40.5 (9053)
DOAC reduced dose	0.0 (0)	31.1 (6966)
Statins	43.6 (6045)	50.7 (11 343)
NSAID	20.4 (2824)	19.9 (4449)
β-Blockers	49.2 (6817)	67.1 (15 021)
Calcium	33.6 (4652)	36.6 (8183)
Loop diuretics	40.1 (5559)	44.6 (9976)
Nonloop diuretics	37.6 (5209)	41.8 (9356)
Vasodilators	5.4 (744)	5.5 (1229)
ACE inhibitor/ARB	48.5 (6720)	55.4 (12 388)

Výsledky

Strata	Thromboembolism, % (95% CI)		Major bleeding, % (95% CI)		Net clinical benefit,* % (95% CI)
	Non-users†	OAC users	Non-users†	OAC users	
Overall	2.1% (1.8% to 2.3%)	1.5% (1.4% to 1.7%)	3.2% (2.9% to 3.5%)	3.5% (3.2% to 3.8%)	0.70% (0.32% to 1.08%)
Age, y					
≤75	1.9% (1.4% to 2.4%)	1.2% (0.9% to 1.4%)	3.7% (3.0% to 4.3%)	2.8% (2.5% to 3.2%)	1.16% (0.57% to 1.73%)
>75	2.2% (1.9% to 2.5%)	1.7% (1.5% to 1.9%)	3.0% (2.6% to 3.4%)	3.8% (3.5% to 4.1%)	0.43% (−0.09% to 0.90%)
Frailty					
Intermediate (HFRS≤15)	2.0% (1.8% to 2.3%)	1.5% (1.3% to 1.6%)	3.1% (2.8% to 2.5%)	3.3% (3.1% to 3.6%)	0.76% (0.36% to 1.18%)
High (HFRS>15)	2.2% (1.7% to 2.8%)	1.9% (1.4% to 2.4%)	3.4% (2.7% to 4.1%)	4.3% (3.6% to 5.1%)	0.25% (−0.79% to 1.30%)

- Riziko TE príhod a veľkého krvácania sa zvyšovalo s vekom a fragilitou pacienta.
- **Záver:** Dánska kohortová štúdia preukázala jednoznačný klinický benefit v prospech AKL, avšak ten klesal so zvyšujúcim sa vekom a krehkosťou pacienta.

➤ **Aj fragilných pacientov je potrebné antikoagulovať, ich manažment si však vyžaduje väčšiu opatrnosť.**

Záver

- v uvedenej problematike sú odporúčania „skúpe“ a nejasné → problematický manažment v klinickej praxi
- manažment FP v špecifických klinických situáciách si vyžaduje **multidisciplinárny prístup**
- každého pacienta je dôležité manažovať s opatrnosťou, individuálne, s kladením dôrazu na klinický úsudok každého špecialistu



Ďakujem za pozornosť.