

Stroke prevention in atrial fibrillation patients in Poland and other European countries: insights from the GARFIELD-AF registry

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Abstract

Background: Atrial fibrillation (AF) is the most common clinically-significant arrhythmia in the adult population, and it is a strong independent risk factor for cerebrovascular accidents. Patients with non-valvular AF are five times more likely to suffer a stroke. Despite the clear recommendations for anticoagulant therapy, many clinicians are still reluctant to provide routine oral anticoagulation to patients with AF, despite the potential clinical benefits.

Aim: To compare Polish and European populations of patients with AF and the every-day practice of stroke prevention in Poland and in the rest of Europe.

Methods: We analysed the baseline data from the two first cohorts of patients enrolled in the GARFIELD-AF registry (an ongoing prospective, multicentre, international registry of patients newly diagnosed with AF) in Poland and in the rest of Europe.

Results: Polish AF patients are generally younger (median age 67 years in both cohorts vs. 73 in cohort 1 in the rest of Europe and 72 in cohort 2), but they carry a burden of more concomitant diseases. There are some noticeable differences in stroke prevention between Poland and the rest of Europe. The use of vitamin K antagonists (VKAs) is generally higher in other European countries in both cohorts (in Poland 41.7% in cohort 1 and 36.9% in cohort 2 vs. 55.5% in cohort 1 and 41.9% in cohort 2 in the rest of Europe). Meanwhile, it is generally more common in Poland to treat patients with both VKAs and antiplatelets (in cohort 1 20.4% of patients in Poland received vs. 12.0% in the rest of Europe). A total of 5.6% of patients in cohort 1 in Poland receive no antithrombotic treatment (it means: no VKA, oral factor Xa or thrombin inhibitors, antiplatelets), meanwhile in other countries it amounts to 8.5%. The usage of non-vitamin K oral anticoagulants is growing in Poland similarly to the other European countries.

Conclusions: The GARFIELD-AF registry data shows how distant everyday clinical practice is from the guidelines. It shows that still in Poland, as well as in the rest of Europe, too many patients with low stroke risk are treated with anticoagulants, while too frequently patients at high stroke risk are left with no stroke prevention. Although the tendency to use non-vitamin K oral anticoagulants is growing comparably in Poland and in the rest of Europe, the proportion of patients with intermediate and high stroke risk is not growing and more patients at low stroke risk are treated with anticoagulants.

Key words: atrial fibrillation, stroke prevention, oral anticoagulants

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INTRODUCTION

Atrial fibrillation (AF) is the most common clinically-significant arrhythmia in the adult population, and it is a strong independent risk factor for cerebrovascular accidents. AF affects approximately 1–2% of the population, and the incidence of this arrhythmia is growing [1, 2].

Patients with non-valvular AF are five times more likely to suffer a stroke and three times more likely to develop congestive heart failure (CHF) [3, 4]. One in five of all strokes is attributed to this arrhythmia [3]. Mortality due to, and recurrence of, ischaemic strokes associated with AF is high: the risk of death from AF-related stroke is doubled compared to the general population [5, 6].

The current European Society of Cardiology (ESC) recommendations for the management of AF emphasise the importance of estimating the risk of stroke and the risk of bleeding in patients with AF [6]. The CHA₂DS₂-VASc score is a useful tool that identifies AF patients with a truly low risk of stroke, and is therefore recommended for assessing the risk of stroke and indications for anticoagulation therapy [6].

Despite the clear recommendations for anticoagulant therapy, many clinicians are still reluctant to provide routine oral anticoagulation to patients with AF, in spite of the potential clinical benefits [3, 6, 7].

The Global Anticoagulant Registry in the FIELD-Atrial Fibrillation (GARFIELD-AF) is an ongoing prospective, multicentre, international registry of patients newly diagnosed with AF.

Other international registries have studied stroke prevention in patients with AF [8, 9], but the GARFIELD-AF registry is unique because it prospectively registers newly-diagnosed patients with non-valvular AF from all over the world, irrespective of their treatment (anticoagulants, antiplatelets, or no antithrombotic therapy) [3].

The main aim of this registry is to describe real-life practice in the treatment of patients with AF [3]. Other objectives are: to assess the rates of stroke and systemic embolisation; and the outcome of patients with specific reference to the incidence of bleeding complications, fluctuations of international normalised ratio over time (for patients on vitamin K antagonist [VKA] therapy), and therapy persistence [3].

In this paper we describe the baseline characteristics of the first two cohorts of patients enrolled in the GARFIELD-AF registry in Poland and in other European countries (namely: Finland, Norway, Sweden, the United Kingdom, Denmark, France, Germany, the Netherlands, Belgium, Austria, Italy, Spain, the Czech Republic, Russia, Ukraine, and Hungary), in order to distinguish the differences between the two populations.

METHODS

Patients are being enrolled in the registry in five independent, sequential cohorts. Enrolment in the first cohort started in December 2009, and follow-up is anticipated to end in the third quarter of 2018 [3, 10].

The first three cohorts have completed enrolment, and the fourth is close to being closed. Cohort 1 consists of prospective and retrospective patients. The retrospective group consists of patients aged over 18 years who were diagnosed with non-valvular AF in the 6–24 months before enrolment; data were collected for these patients for up to two years after diagnosis. The prospective group consists of patients aged over 18 years who were diagnosed with non-valvular AF plus at least one additional stroke risk factor in the six weeks before enrolment. Cohorts 2–5 will consist of prospective patients only [3]. Prospective patients will be followed for 2–8 years [3].

By describing the various cohorts longitudinally, GARFIELD-AF will show not only the changes in each cohort's treatment to prevent stroke over the follow-up period, but also differences in the time to introduction of new anticoagulants.

In total, 10,594 patients were enrolled in cohort 1 and 11,667 in cohort 2. In Poland, 909 patients were enrolled in cohort 1 and 605 in cohort 2. In other European countries, 5654 patients were enrolled in cohort 1 and 7014 patients in cohort 2.

According to the protocol, patients are assessed every four months and detailed data about thromboembolic and bleeding events as well as treatment changes and interruptions are collected.

Some preliminary data from the first two cohorts are already available for the Polish, European, and global populations, and some conclusions can be drawn about how patients with AF are treated.

The aim of this paper was to analyse baseline data from the two first cohorts in Poland and see if they correspond with the results of this registry from other European countries.

Statistical analysis

This paper contains descriptive summaries of baseline characteristics for patients in cohorts 1 and 2. Continuous variables are presented using the number of non-missing observations, mean and standard deviation or median and interquartile range. Categorical variables are presented using frequencies and percentages. Percentages are rounded to one decimal place; therefore, there may be occasions where (for instance) the total does not exactly equal 100%. Analysis focuses on cross-sectional data at baseline. Data analysis was performed with SAS statistical software, release 9.4 (SAS Institute Inc., Cary, NC).

RESULTS

Main similarities between Polish and other European countries (demographics, concomitant diseases, and risk stratification)

In terms of baseline demographic data, the population enrolled in cohorts 1 and 2 of GARFIELD-AF in Poland showed some similarities with the population in other European countries. The frequencies of obesity, overweight, and current or ex-smokers were similar (Table 1).

Table 1. Baseline characteristics of Polish patients and patients in other European countries

	Poland		Other Europe countries	
	Cohort 1 (n = 909)	Cohort 2 (n = 605)	Cohort 1 (n = 5654)	Cohort 2 (n = 7014)
Median age [years] (IQR)	67.0 (59.5–75.0)	67.0 (60.0–76.0)	73.0 (66.0–79.0)	72.0 (64.0–79.0)
Mean age ± SD [years]	67.0 ± 10.8	67.3 ± 11.0	71.7 ± 10.4	70.8 ± 10.9
Patients < 65 years old [%] (n/N)	42.5% (386/908)	41.7% (252/605)	22.6% (1275/5654)	26.2% (1838/7014)
Female [%] (n/N)	47.1% (428/909)	43.8% (265/605)	44.2% (2501/5654)	45.1% (3163/7014)
BMI, median (IQR)	28.4 (25.7–31.8)	28.7 (25.6–32.0)	27.7 (24.9–31.1)	28.0 (25.2–31.7)
Overweight patients (BMI 25–< 30) [%] (n/N)	41.4% (366/884)	40.6% (217/535)	42.3% (1953/4622)	40.8% (2145/5251)
Obese patients (BMI ≥ 30) [%] (n/N)	37.9% (335/884)	39.6% (212/535)	32.3% (1492/4622)	35.8% (1881/5251)
Current smokers [%] (n/N)	8.2% (73/894)	12.6% (73/581)	8.4% (438/5190)	10.5% (649/6167)
Ex-smokers [%] (n/N)	28.4% (254/894)	23.4% (136/581)	25.9% (1342/5190)	25.5% (1574/6167)
Alcohol consumers [%] (n/N)	46.6% (418/897)	43.7% (250/572)	52.7% (2571/4875)	55.0% (3084/5604)
Heavy alcohol consumers [%] (n/N)	0.6% (5/897)	0.9% (5/572)	1.3% (63/4875)	2.0% (111/5604)
Patients diagnosed by cardiologist [%] (n/N)	62.3% (566/909)	61.0% (369/605)	45.0% (2538/5648)	52.2% (3665/7014)
Patients diagnosed by primary care specialist/general practitioner [%] (n/N)	10.5% (95/909)	9.6% (58/605)	26.2% (1477/5648)	22.0% (1545/7014)
Patients diagnosed by internal medicine specialist [%] (n/N)	26.4% (240/909)	27.9% (169/605)	25.6% (1446/5648)	22.5% (1579/7014)
AF diagnosis in hospital [%] (n/N)	75.2% (684/909)	74.2% (449/605)	41.5% (2327/5610)	54.2% (3805/7014)

AF — atrial fibrillation; BMI — body mass index; IQR — interquartile range; SD — standard deviation

There were also some similarities regarding concomitant diseases. The proportions of patients with CHF in New York Heart Association classes III and IV and with diabetes mellitus (DM) were similar. In both populations, type 2 DM was more frequent than type 1. Table 2 shows the detailed data.

Stroke risk according to the CHADS₂ score was similar in the Polish population and the population from other European countries, although the CHA₂DS₂-VASc score was slightly lower in Poland than in other European countries (Tables 3, 4).

The risk of bleeding according to the HAS-BLED score was low in Poland and in other European countries (Table 5); however, only a limited number of patients had HAS-BLED scores available, with a large number of missing values. As with the CHADS₂ and CHA₂DS₂-VASc scores, HAS-BLED scores were calculated from values for the individual components collected in GARFIELD-AF. Therefore, if the data for one component were missing, it was impossible to estimate the risk score.

Main differences between Poland and other European countries (demographics, concomitant diseases, risk stratification, and care setting specialties)

The main difference in the demographic data is that Polish patients included in GARFIELD-AF were generally younger than patients in other European countries (Table 1).

According to the data, fewer Polish patients were consumers of alcohol, and the percentage of patients who were considered heavy consumers was half of that in other European countries.

There were also some differences in the prevalence of concomitant diseases (Table 2). Despite being generally younger, Polish patients had a heavier burden of concomitant disease, with diagnoses of hypertension, hypercholesterolaemia, CHF and coronary artery disease (CAD) being more frequent than in other European countries. By contrast, a documented history of systemic embolisation and transient ischaemic attacks (TIAs) or stroke was less frequent in the Polish population. This may be due to the fact that those conditions are underdiagnosed in Poland.

In Poland, the vast majority of patients were diagnosed with AF in hospital and, in contrast to other European countries, where patients were more frequently diagnosed by primary care specialists/general practitioners, more Polish patients were diagnosed by cardiologists. The proportions of patients diagnosed by internal medicine specialists were similar. Table 1 shows the detailed data.

Differences and similarities in treatment strategy

There were also some important differences in treatment strategy between Poland and other European countries: VKAs solo were prescribed less frequently in Poland than in other European countries (cohort 1: 41.7% vs. 55.5%; cohort 2:

Table 2. Comorbidities of Polish patients and patients in other European countries

Proportion of patients with the comorbidity	Poland [%] (95% CI)		Other European countries [%] (95% CI)	
	Cohort 1 (n = 909)	Cohort 2 (n = 605)	Cohort 1 (n = 5654)	Cohort 2 (n = 7014)
Diabetes mellitus:	23.4% (20.7–26.2)	21.3% (18.1–24.6)	22.0% (20.9–23.1)	21.1% (20.1–22.0)
Type 1	1.1% (0.4–1.8)	0.8% (0.1–1.5)	0.8% (0.6–1.1)	0.6% (0.5–0.8)
Type 2	22.3% (19.6–25.0)	20.5% (17.3–23.7)	21.2% (20.1–22.2)	20.4% (19.5–21.4)
History of hypertension	85.5% (83.2–87.8)	85.8% (83.0–88.6)	80.5% (79.5–81.6)	80.7% (79.7–81.6)
Hypercholesterolaemia	52.5% (49.2–55.7)	55.7% (51.7–59.7)	45.1% (43.8–46.4)	44.7% (43.5–45.9)
CHF	33.0% (29.9–36.1)	29.6% (25.9–33.2)	16.6% (15.7–17.6)	21.6% (20.6–22.6)
CHF NYHA class:				
I	7.7% (4.7–10.7)	6.8% (3.1–10.5)	18.3% (15.7–20.8)	15.4% (13.5–17.3)
II	63.0% (57.5–68.5)	61.9% (54.8–69.1)	52.6% (49.3–55.9)	50.8% (48.2–53.4)
III	25.0% (20.1–29.9)	30.1% (23.3–36.9)	26.9% (23.9–29.8)	30.6% (28.2–33.0)
IV	4.3% (2.0–6.6)	1.1% (0.0–2.7)	2.3% (1.3–3.2)	3.1% (2.2–4.1)
Coronary artery disease	30.7% (27.7–33.7)	25.6% (22.1–29.1)	17.5% (16.5–18.5)	21.4% (20.4–22.4)
Systemic embolisation	0.4% (0.0–0.9)	0.3% (0.0–0.8)	0.9% (0.6–0.6)	0.7% (0.5–0.9)
History of stroke/TIA	8.3% (6.5–10.0)	7.9% (5.8–10.1)	15.2% (14.3–16.1)	21.4% (20.4–22.4)
Dementia	2.6% (1.6–3.7)	3.1% (1.0–3.3)	1.7% (1.4–2.0)	1.4% (1.1–1.6)

CI — confidence interval; CHF — congestive heart failure; NYHA — New York Heart Association; TIA — transient ischaemic attack

Table 3. CHADS₂ score categories in Poland and in other European countries

CHADS ₂ score categories	Poland		Other European countries	
	Cohort 1 (n = 909)	Cohort 2 (n = 605)	Cohort 1 (n = 5654)	Cohort 2 (n = 7014)
0	4.4% (n = 40)	5.6% (n = 34)	4.5% (n = 248)	5.1% (n = 352)
1	38.7% (n = 349)	39.8% (n = 241)	33.8% (n = 1859)	32.1% (n = 2191)
2	31.8% (n = 287)	30.2% (n = 183)	33.5% (n = 1841)	36.4% (n = 2489)
3	17.5% (n = 158)	15.9% (n = 96)	17.3% (n = 949)	16.0% (n = 1095)
4	5.5% (n = 50)	6.1% (n = 37)	7.7% (n = 422)	7.5% (n = 514)
5	1.3% (n = 12)	1.8% (n = 11)	2.7% (n = 147)	2.4% (n = 166)
6	0.7% (n = 6)	0.5% (n = 3)	0.6% (n = 31)	0.4% (n = 28)
Missing	n = 7	n = 0	n = 157	n = 179
Mean (standard deviation)	1.9 (1.1)	1.8 (1.1)	2.0 (1.2)	2.0 (1.1)

36.9% vs. 41.9%). By contrast, Polish patients were more commonly treated with VKAs plus antiplatelets than patients in other European countries (20.4% vs. 12.0% in cohort 1 and 16.3% vs. 10.6% in cohort 2). The use of antiplatelets alone, and lack of any antithrombotic treatment (VKAs, antiplatelets, direct thrombin inhibitors [DTI], or factor Xa inhibitors [FXa]), did not seem to differ much between the two populations: antiplatelets alone, Poland cohort 1 27.4%, other European countries cohort 1 21.7%, Poland cohort 2 23.8%, other European countries cohort 2 22.7%; no antithrombotic treatment, Poland cohort 1 6.1%, other European countries cohort 1 8.7%, Poland cohort 2 10.3%, other European countries cohort 2 10.4% (Fig. 1).

Stroke risk and stroke prevention

The analysis of CHA₂DS₂-VASc risk scores and chosen methods of stroke prevention provides some very interesting data with regard to dissimilarities between Poland and other European countries, and when considering changes between cohort 1 and cohort 2 in both populations.

VKA only treatment

As we have already shown, the use of VKAs in both cohorts of GARFIELD-AF was generally higher in other European countries than in Poland.

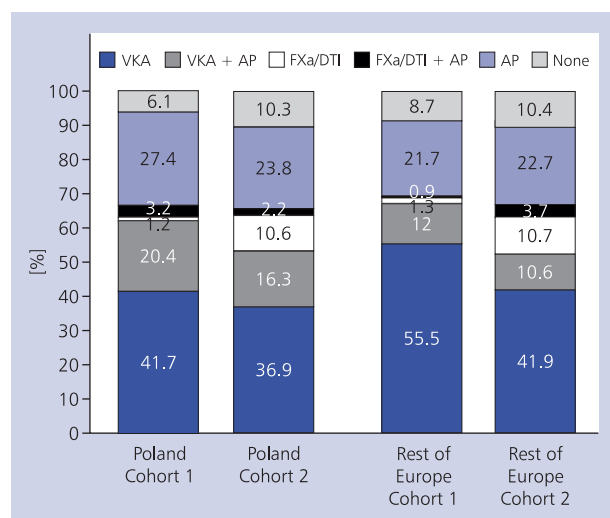
In cohort 1, patients with a CHA₂DS₂-VASc score of 0, 1, or 2 were treated with VKAs less frequently in Poland

Table 4. CHA₂DS₂-VASc score categories in Poland and in other European countries

CHA ₂ DS ₂ -VASc score categories	Poland		Other European countries	
	Cohort 1 (n = 909)	Cohort 2 (n = 605)	Cohort 1 (n = 5654)	Cohort 2 (n = 7014)
0	1.2% (n = 11)	2.7% (n = 16)	1.2% (n = 64)	1.5% (n = 101)
1	14.2% (n = 128)	17.5% (n = 105)	9.3% (n = 509)	9.1% (n = 619)
2	22.2% (n = 200)	19.2% (n = 115)	18.0% (n = 987)	18.5% (n = 1250)
3	21.1% (n = 190)	21.2% (n = 127)	24.1% (n = 1326)	25.5% (n = 1727)
4	20.7% (n = 187)	19.5% (n = 117)	23.3% (n = 1280)	23.2% (n = 1569)
5	12.3% (n = 111)	10.7% (n = 64)	14.0% (n = 771)	12.8% (n = 866)
6–9	8.3% (n = 75)	9.3% (n = 56)	10.2% (n = 559)	9.5% (n = 641)
Missing	n = 7	n = 5	n = 158	n = 241
Mean (standard deviation)	3.2 (1.6)	3.1 (1.7)	3.5 (1.6)	3.4 (1.6)

Table 5. HAS-BLED score categories in Poland and in other European countries

HAS-BLED score categories	Poland		Other European countries	
	Cohort 1 (n = 909)	Cohort 2 (n = 605)	Cohort 1 (n = 5654)	Cohort 2 (n = 7014)
0	23.4% (n = 182)	23.8% (n = 119)	14.4% (n = 518)	15.1% (n = 684)
1	39.8% (n = 309)	40.5% (n = 202)	44.8% (n = 1607)	43.4% (n = 1971)
2	27.8% (n = 216)	25.5% (n = 127)	29.6% (n = 1064)	29.5% (n = 1339)
3	7.9% (n = 61)	8.8% (n = 44)	9.2% (n = 329)	10.4% (n = 474)
4	0.9% (n = 7)	1.0% (n = 5)	1.7% (n = 62)	1.4% (n = 62)
5	0.3% (n = 2)	0.4% (n = 2)	0.2% (n = 8)	0.2% (n = 8)
6–9	–	–	0.0% (n = 1)	0.0% (n = 1)
Missing	n = 132	n = 106	n = 2065	n = 2475
Mean (standard deviation)	1.2 (0.9)	1.2 (1.0)	1.4 (0.9)	1.4 (0.9)

**Figure 1.** Stroke prevention in Poland and the rest of Europe, cohort 1 and cohort 2; VKA — vitamin K antagonists; AP — antiplatelets; FXa — factor Xa inhibitors; DTI — direct thrombin inhibitors

than in other European countries (Figs. 2, 4), while there was no difference in cohort 2 (Figs. 3, 5).

The proportion of Polish patients at the highest risk of stroke (i.e. those with a CHA₂DS₂-VASc score of 6–9) who were treated with VKAs was smaller than the proportion with a CHA₂DS₂-VASc score of 1 who were treated with VKAs (cohort 1: 27.9% vs. 47.8%; cohort 2: 21.4% vs. 41.9%). In other European countries, the proportions were alike (cohort 1: 47.8% vs. 52.3%; cohort 2: 35.1% vs. 36.0%; Figs. 2–5).

Other treatment strategies

In Poland, use of the combination of VKAs and antiplatelets was most frequent in high-stroke-risk groups (CHA₂DS₂-VASc score of 4–9; Figs. 2, 3).

The use of FXa/DTI was generally similar in Poland and in other European countries, but in cohort 1, the combination of FXa/DTI with antiplatelets was more common in Poland (3.2% vs. 0.9%). The difference was most pronounced in the subgroup of patients at the highest risk of stroke (CHA₂DS₂-VASc score of 6–9): 8.8% in Poland vs. 0.4% in other European countries.

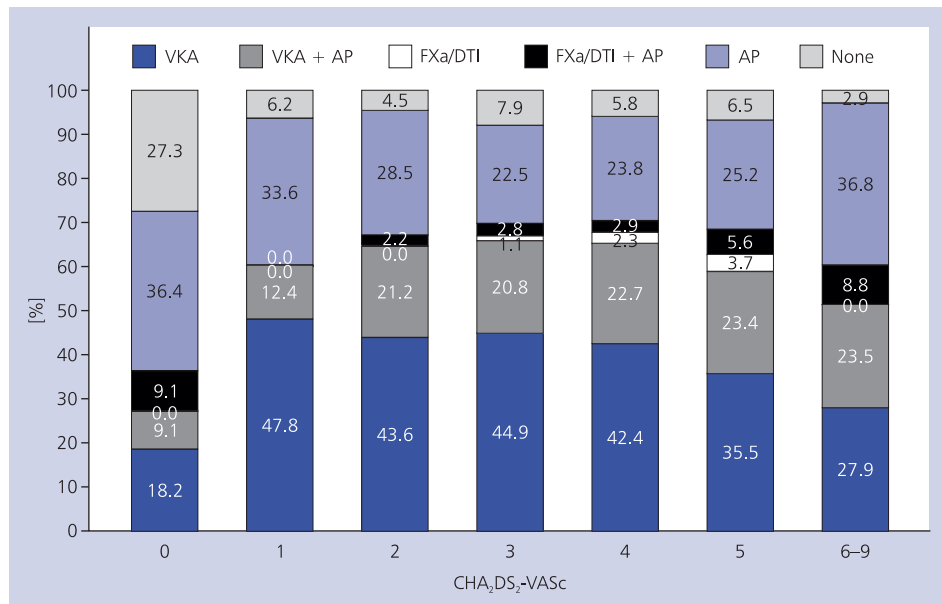


Figure 2. Stroke prevention according to CHA₂DS₂-VASc score categories in Poland, cohort 1; VKA — vitamin K antagonists; AP — antiplatelets; FXa — factor Xa inhibitors; DTI — direct thrombin inhibitors

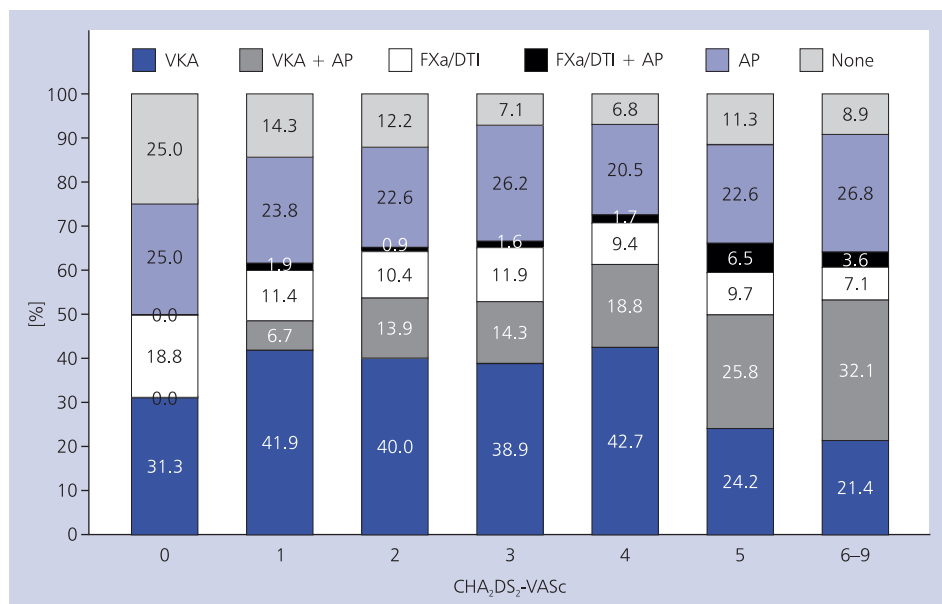


Figure 3. Stroke prevention according to CHA₂DS₂-VASc score categories in Poland, cohort 2; VKA — vitamin K antagonists; AP — antiplatelets; FXa — factor Xa inhibitors; DTI — direct thrombin inhibitors

No stroke prevention

A total of 6.1% of patients in cohort 1 in Poland received no antithrombotic treatment (i.e. no VKA, FXa/DTI, or antiplatelets), compared with 8.7% in other European countries.

In cohort 1, 23.8% of patients with a CHA₂DS₂-VASc score of 0 received no therapy, while the same figure for other European countries was 27.3% (Figs. 2, 4). For cohort 1 patients with a score of 1, the proportion who received no therapy was 6.2% in Poland and 16.4% in other European countries

(Figs. 2, 4). In Cohort 2, fewer patients at low risk of stroke (score of 0) and at intermediate risk of stroke (score of 1) received no therapy in Poland than in other European countries (score of 0, 25.0% vs. 29.6%; score of 1, 14.3% vs. 17.5%; Figs. 3, 5). Surprisingly, in cohort 2 a high proportion of Polish patients at high stroke risk (score of 5) received no stroke prevention therapy (11.3% vs. 7.4% in other European countries; Figs. 3, 5). In both cohorts, similar proportions of patients with the highest stroke risk (score of 6–9) were left with no

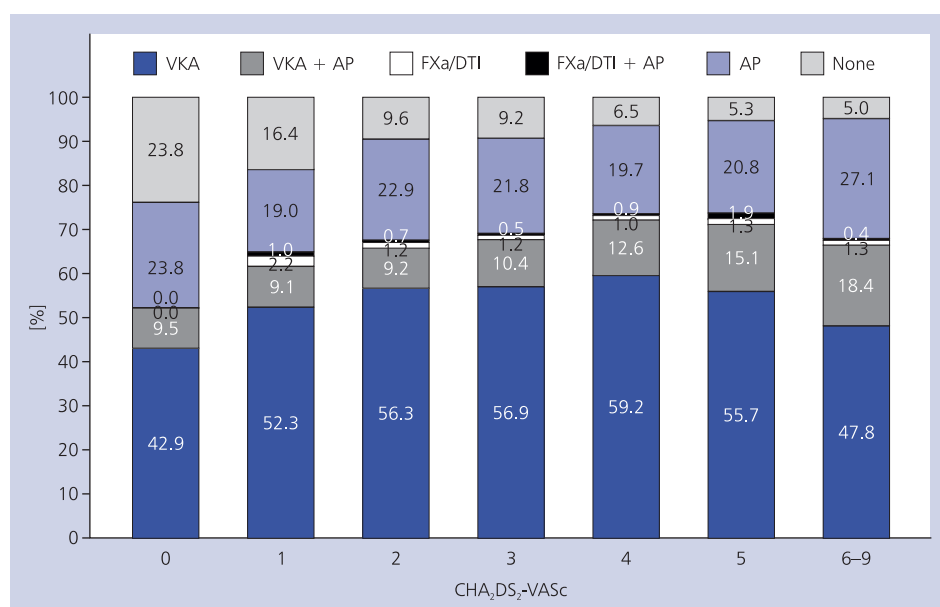


Figure 4. Stroke prevention according to CHA₂DS₂-VASc score categories in other European countries, cohort 1; VKA — vitamin K antagonists; AP — antiplatelets; FXa — factor Xa inhibitors; DTI — direct thrombin inhibitors

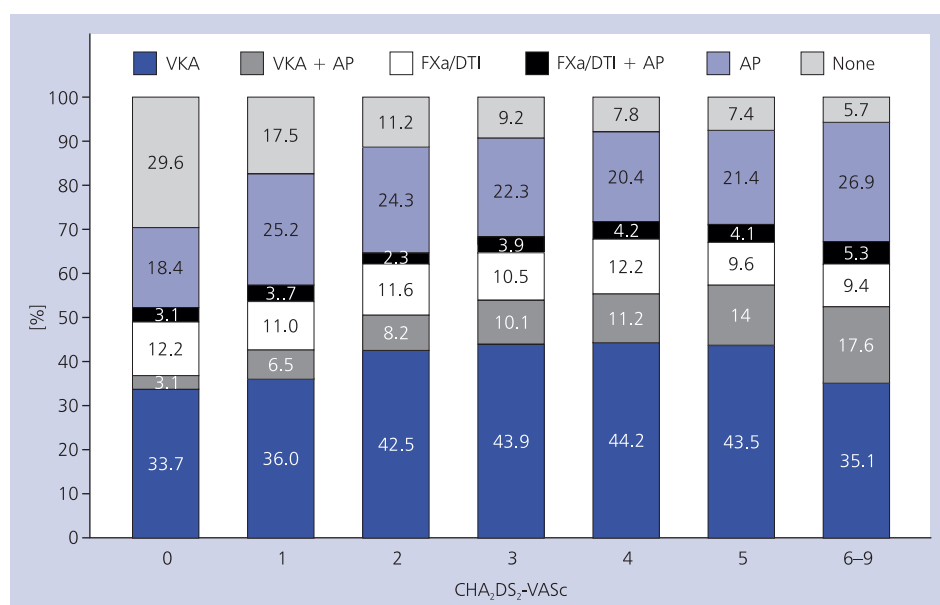


Figure 5. Stroke prevention according to CHA₂DS₂-VASc score categories in other European countries, cohort 2; VKA — vitamin K antagonists; AP — antiplatelets; FXa — factor Xa inhibitors; DTI — direct thrombin inhibitors

stroke prevention in Poland and in other European countries (cohort 1: 2.9% vs. 5.0%; cohort 2: 8.9% vs. 5.7%; Figs. 2–5).

Stroke prevention with non-vitamin K oral anticoagulants

It is also very interesting to analyse changes in stroke prevention between the two cohorts in the context of the introduction of non-vitamin K oral anticoagulants.

While the general usage of VKAs in Poland remained at a similar level in both cohorts (41.7% in cohort 1 and 36.9% in cohort 2), the percentage of Polish patients treated with non-vitamin K oral anticoagulants increased from 1.2% in cohort 1 to 10.6% in cohort 2.

A similar relation was seen between cohort 1 and cohort 2 for the use of non-vitamin K oral anticoagulants in other European countries (from 1.3% in cohort 1 to 10.7% in cohort 2).

DISCUSSION

Analysis of the baseline data from the GARFIELD-AF registry provides insights into the Polish population of AF patients and has revealed some similarities and dissimilarities between this population and patients enrolled in other AF registries, as well as patients enrolled in GARFIELD-AF in other European countries.

The results of other international AF patient registries also conducted in Poland have been published in past years (the REgistry on Cardiac rhythm disORDers assessing the control of Atrial Fibrillation [RecordAF] — 303 patients enrolled in Poland and RHYTHM-AF — 501 patients enrolled in Poland), and some baseline characteristic data of the Polish population also are available.

Polish patients enrolled in GARFIELD-AF, RecordAF, and RHYTHM-AF are of a similar age: mean age 67.0 ± 10.8 years in GARFIELD-AF cohort 1 and 67.3 ± 11.0 years in cohort 2 vs. 63 ± 12.0 years in RecordAF and 64.2 ± 12.1 years in RHYTHM-AF [11, 12]. In Poland, the most common concomitant disease in all three registries was hypertension: its prevalence is higher in the GARFIELD-AF population than in RecordAF and RHYTHM-AF (85.5% of patients in GARFIELD-AF cohort 1, 85.8% in cohort 2, 71% of patients in RecordAF, and 75% in RHYTHM-AF) [11, 12].

The frequency of CHF is also similar in all three registries (33.0% of patients in GARFIELD-AF cohort 1, 29.6% of patients in cohort 2, 27.8% of patients in RecordAF, and 24.1% of patients in RHYTHM-AF) [11, 12]. The prevalence of CAD is higher in the Polish GARFIELD-AF population than in the two previous registries (30.7% of patients in cohort 1 and 25.6% of patients in cohort 2 vs. 18.9% of patients in RecordAF and only 3% of patients in RHYTHM-AF) [11, 12]. The prevalence of DM is similar in Polish patients enrolled in the GARFIELD-AF and RHYTHM-AF registries (23.4% of patients in GARFIELD-AF cohort 1, 21.3% of patients in cohort 2, and 20.5% in RHYTHM-AF) [12] but somewhat higher in GARFIELD-AF compared with RecordAF (12.3% of patients) [11].

Patients in Poland and in other European countries seem to have a similar risk of stroke, as calculated using the CHADS₂ and CHA₂DS₂-VASc scales. Interestingly, when analysing the distribution of points in both stroke risk scales, it is noticeable that in Poland, compared with other European countries, slightly more patients receive 1 point in CHADS₂ and a smaller proportion of patients are categorised in groups of 4–5 points (Table 3). Similarly, with CHA₂DS₂-VASc, Polish patients more frequently are classified in a truly low or low stroke risk group (i.e. 0 or 1 points for males and 1 or 2 points for females) in both cohorts (Table 4).

When looking at the distribution of HAS-BLED risk scores, it is important to underline that Polish patients more frequently have a score of zero, and therefore are categorised as low stroke risk patients (Table 5).

In the vast majority of cases, Polish patients receive an initial diagnosis of AF in hospital. This may be because routine

pulse checking and electrocardiographic screening of patients with an irregular pulse are rare during outpatient visits.

CONCLUSIONS

The GARFIELD-AF registry data show how distant everyday clinical practice is from the guidelines of the European and American cardiac societies.

What is really concerning is the fact that — although we have some useful tools to estimate the risk of stroke in AF patients, and nowadays we also have a selection of oral anticoagulants available to prevent stroke — clinicians are still somehow reluctant to prescribe antithrombotic treatment, especially to those patients who are at the greatest risk.

Baseline data from the first two cohorts of the GARFIELD-AF registry show quite clearly that, in Poland — as in other European countries — too many patients with low stroke risk are treated with anticoagulants, while (too frequently) patients at high risk of stroke are left with no stroke prevention. If we take into consideration the fact that the majority of Polish patients are treated by cardiologists, the concern is even greater. It needs to be outlined that prescribing of antithrombotic treatment seems to be suboptimal in Poland.

Generally, Polish patients with the highest stroke risk are prescribed VKAs less frequently, while patients from lower risk groups receive VKAs more often than in other European countries.

In other European countries, the prescription of anticoagulant therapy seems to be more adequate — a higher percentage of patients with higher stroke risk receive VKAs.

Although the tendency to use non-vitamin K oral anticoagulants is increasing in Poland and in other European countries, the proportion of patients with intermediate and high stroke risk receiving anticoagulants is not increasing; instead, more patients at low risk of stroke are being treated with anticoagulants (Figs. 2–5).

In the era of the introduction of new anticoagulants, data from all of the consecutive GARFIELD-AF cohorts with a follow-up of at least two years will undoubtedly provide very interesting and valuable insights into the changing reality of stroke prevention over time.

Conflict of interest: Janina Stepińska: paid lectures, advisory groups for Boehringer Ingelheim, Bayer, Bristol-Myers Squibb/Pfizer, Roche Diagnostic, Sanofi-Aventis; Beata Woźakowska-Kapton: paid lectures for Boehringer Ingelheim, Bayer, Pfizer; Piotr Kukla: paid lectures for Boehringer Ingelheim, Bayer, Polpharma.

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Czy prewencja udarów u chorych z migotaniem przedsionków w Polsce jest porównywalna z innymi krajami Europy? Dane z rejestru GARFIELD-AF

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Streszczenie

Wstęp: Migotanie przedsionków (AF) jest najczęściej występującą istotną klinicznie arytmią w populacji dorosłych i stanowi silny niezależny czynnik ryzyka zdarzeń sercowo-naczyniowych. Pacjenci z niezastawkowym AF są 5-krotnie bardziej narażeni na wystąpienie udaru niedokrwienego. Mimo jasnych rekomendacji dotyczących leczenia przeciwzakrzepowego wielu lekarzy wciąż nie stosuje rutynowo tej terapii u pacjentów z AF, mimo potencjalnych korzyści klinicznych tego leczenia.

Cel: Celem niniejszej pracy było porównanie polskiej populacji pacjentów z AF z populacją chorych z AF w pozostałych krajach europejskich oraz porównanie codziennej praktyki profilaktyki udarów w Polsce i innych krajach Europy.

Metody: GARFIELD-AF jest trwającym prospektywnym, wieloośrodkowym, międzynarodowym rejestrem pacjentów z nowo rozpoznany AF. Analizuje się w nim dane wyjściowe dwóch pierwszych kohort pacjentów włączonych do badania w Polsce i w pozostałych krajach Europy.

Wyniki: Polscy pacjenci z AF są młodsi niż pacjenci z AF w pozostałych krajach Europy (mediana wieku 67 lat w obu kohortach w Polsce vs. 73 lat w kohorcie 1 i 72 lat w kohorcie 2 w pozostałych krajach Europy), ale są częściej obciążeni licznymi chorobami towarzyszącymi. Zauważalne są różnice w profilaktyce udarów między Polską a pozostałymi krajami europejskimi. Częstość stosowania antagonistów witaminy K (VKA) jest generalnie wyższa w pozostałych krajach Europy w obu kohortach (w Polsce 41,7% w kohorcie 1 i 36,9% w kohorcie 2 vs. 55,5% w kohorcie 1 i 41,9% w kohorcie 2 w pozostałych krajach Europy). Jednocześnie łączona terapia VKA i lekami przeciwplatekcyjnymi jest stosowana częściej w Polsce (20,4% w kohorcie 1 w Polsce vs. 12,0% w pozostałych krajach Europy). 5,6% pacjentów w kohorcie 1 w Polsce nie jest poddanych żadnej terapii przeciwzakrzepowej (tzn. nie otrzymuje VKA, doustnych inhibitorów czynnika Xa lub trombiny ani leków przeciwplatekcyjnych), natomiast w pozostałych krajach Europy 8,5% pacjentów nie stosuje takiego leczenia. Częstość przyjmowania doustnych antykoagulantów niebędących antagonistami witaminy K rośnie w Polsce porównywalnie z ich wykorzystaniem w pozostałych krajach Europy.

Wnioski: Dotychczasowe wyniki rejestru GARFIELD-AF jednoznacznie wskazują, jak daleka od wytycznych jest codzienna praktyka kliniczna dotycząca profilaktyki udarów u chorych z AF. Zarówno w Polsce, jak i w pozostałych krajach europejskich zbyt wielu pacjentów z niskim ryzykiem udaru jest leczonych przeciwzakrzepowo, podczas gdy zbyt rzadko pacjenci z najwyższych grup ryzyka są objęci właściwą profilaktyką udaru. Mimo że stosowanie doustnych antykoagulantów niebędących antagonistami witaminy K rośnie zarówno w Polsce, jak i w pozostałych krajach europejskich, nie rośnie grupa chorych wysokiego ryzyka objętych profilaktyką przeciwzakrzepową, zwiększa się natomiast odsetek pacjentów z grupy niskiego ryzyka leczonych przeciwzakrzepowo.

Słowa kluczowe: migotanie przedsionków, profilaktyka udaru, doustne antykoagulanty

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