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**Temat: „*Epidemiologia i postępowanie u chorych z migotaniem przedsionków ze szczególnym uwzględnieniem terapii przeciwkrzepliwej*”**

### **Summary**

Information on epidemiology of atrial fibrillation (AF) in Middle European Countries such as Poland is limited. Although recommendations for the antithrombotic management of AF are based on strong evidence, the European guidelines are not fully implemented into practice. The aim of the study was to present the epidemiology of patients with atrial fibrillation and assessment of anticoagulation in the context of the risk of ischemic stroke and bleeding risk.

We studied 1556 patients with AF from the Reference Cardiology University Centre in Poland in 2012-2014.

A total of 1556 patients with AF (45% women; mean age  $71 \pm 11$  years) were included in the analysis. CHA<sub>2</sub>DS<sub>2</sub> VASc score in the population with non-valvular AF was  $3.5 \pm 1.7$  and HAS-BLED score -  $2.4 \pm 1.1$ . The CHA<sub>2</sub>DS<sub>2</sub> VASc score was the highest in permanent AF ( $p < 0.001$ ) and the HAS-BLED score was the highest in paroxysmal AF ( $p < 0.001$ ).

Valvular AF was observed in 5% ( $n=71$ ) and was more commonly observed in patients with permanent AF ( $p = 0.004$ ).

71% patients received oral antithrombotic therapy (OAC). Anti-vitamin K agents (VKA) were prescribed in 59%, non-vitamin K antagonist oral anticoagulation agents (NOAC) in 12%, acetylsalicylic acid (ASA) alone in 18%. The use of OAC was significantly higher in younger patients ( $p < 0.0001$ ), patients with lower bleeding risk ( $p < 0.0001$ ) and higher left atrium size ( $p < 0.0001$ ). Older patients ( $p < 0.0001$ ) and patients with paroxysmal type of AF were less likely to receive OAC ( $p < 0.0001$ ).

The use of OAC raised with increasing CHA<sub>2</sub>DS<sub>2</sub> VASc score but was less frequent in the group with score  $\geq 4$ . The risk of bleeding was higher in patients without OAC ( $p < 0.0001$ ).

The odds of NOAC use were lower for older patients (OR=0.69; p=0.04; 95% CI 0.48-0.98), patients with ischemic heart disease (OR=0.44; p<0.0001; 95% CI 0.31-0.61), chronic heart failure (OR=0.60; p=0.02; 95% CI 0.38-0.92), anaemia (OR=0.60; p=0.009; 95% CI 0.41-0.88) and HAS-BLED score  $\geq 3$  (OR=0.48; p<0.0001; 95% CI 0.34-0.67). The odds of ASA alone were higher for older patients (OR=1.60; p<0.0001; 95% CI 1.25-2.10), with ischemic heart disease (OR=2.50; p<0.0001; 95% CI 1.92-2.30), history of myocardial infarction (OR=2.00; p<0.0001; 95% CI 1.50-2.70) and were 5.5 times higher for HAS-BLED score  $\geq 3$  (OR=5.50; p<0.0001; 95% CI 4.10-7.40).

In the study population the in-hospital mortality was 2% (n=35) and did not differ between males and females (p=0.07) and types of AF (p=0.8). In multivariate logistic regression, odds of in-hospital death were higher for patients > 75 years old (OR = 6.26, p = 0.001, 95% CI 2.06–19.02) and patients with ejection fraction < 35% (OR = 5.25, p < 0.001, 95% CI 2.24–12.32).

#### CONCLUSIONS:

1. Our population with AF have similar risk of stroke and bleeding as in the European registries.
2. Antithrombotic management in AF patients is well implemented in Polish conditions but the number of patients treated with NOAC is rather low.
3. Patients with high risk of ischaemic stroke according to CHA2DS2VASc score and accompanied by high HAS-BLED score are not given anticoagulant therapy due to the risk of bleeding.
4. Antiplatelet therapy is too often prescribed as the only antithrombotic therapy in stroke prevention.