European **Rev**iew for **Med**ical and **Pharmacol**ogical **Sci**ences 2022; 26: 1068-1069

Letter to the Editor

Comment on: Warfarin adherence and anticoagulation control in atrial fibrillation patients–a systematic review

Dear Editor,

We read with great interest the systematic review by Ababneh et al[1] regarding warfarin adherence and anticoagulation control in patients affected by atrial fibrillation (AF). AF is the most common arrhythmia, ranging from 0.1% in patients aged <55 years to >9% in octogenarian patients. One of the main problems associated with AF is the 5-fold increased risk of ischemic stroke[2]. In this subset of patients, the anticoagulation therapy is central for thromboembolism prevention. However, patients starting anticoagulants are stratified according to several score systems. The most common thromboembolism risk score is represented by the CHA2DS2VASc score, whereas HAS-BLED score is useful for detecting patient's predisposition to a higher bleeding risk[2]. In a recent meta-analysis[2], patients under vitamin K antagonists therapy showed a relative risk reduction of ischemic stroke of 67%, in both primary or secondary prevention, and 25% of all-cause mortality rate compared to controls (either aspirin or placebo), and a mild risk of intracranial haemorrhage. Though, drug's efficacy drops when used outside the controlled environment of clinical trials, mostly due to the lack of patients' adherence[3]. It is vital for AF patients to adhere to medical prescription to get a better balance between thromboembolic and bleeding risk, due to warfarin narrow therapeutic index[1]. Polypharmacy, especially in elderly and polimorbidities patients, have proven to improve prognosis[4-6], though it has also been reported to be one of the main reasons for reduced adherence to treatment[3]. In AF patients undergoing warfarin treatment, it was also reported by several studies a low adherence among young patients, and among patients with low thromboembolic risk (CHA2DS2-VASc score 0-1), and/or affected by dementia, alcohol abuse and high bleeding risk (modified HAS-BLED score C4)[7]. Furthermore, nonadherence to pharmacological treatment is often patients' intentional choice, and, driven by their emotions they may conceal it, which may in turn lead to potentially dire consequences. It has been reported that doctor-patient relationship is fundamental in drug adherence, because when patients do not have the opportunity or if they do not trust the physician, they may not discuss their concerns about treatment, and may feel that they have no alternative to offending the clinician but to hide their actions. This feeling may be further enhanced by the fact that the clinician is often viewed as having more education and knowledge, and not following the indication may result in accusations of distrust in the physician and/or lack of appreciation of his time. Another important issue, which has been exasperated by COVID-19 outbreak, is represented by patients' embarrassment in revealing their financial situation, which may not allow them to afford high-cost medicine and, in certain situations, even the cheaper as they place other family members' needs before them[9]. In this scenario, the clinician can do a lot to improve patient's adherence by inquiring about medication-taking behaviour, by developing a trusting relationship, by improving continuity of care, by understanding the role of the family support and identifying non supportive family member behaviours.

Conflict of Interest

The Authors declare that they have no conflict of interests.

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References

1) Ababneh M, Nasser SA, Rababa'h A, Ababneh F. Warfarin adherence and anticoagulation control in atrial fibrillation patients: a systematic review. Eur Rev Med Pharmacol Sci. 2021 Dec;25(24):7926-7933.
2) Caturano A, Galiero R, Pafundi PC. Atrial Fibrillation and Stroke. A Review on the Use of Vitamin K Antagonists and Novel Oral Anticoagulants. Medicina (Kaunas) 2019; 55: 617.
3) Salmasi S, Loewen PS, Tandun R, Andrade JG, De Vera MA. Adherence to oral anticoagulants among patients with atrial fibrillation: a systematic review and meta-analysis of observational studies. BMJ Open 2020; 10: e034778.
4) Sasso FC, Pafundi PC, Simeon V, De Nicola L, Chiodini P, Galiero R, Rinaldi L, Nevola R, Salvatore T, Sardu C, Marfella R, Adinolfi LE, Minutolo R; NID-2 Study Group Investigators. Efficacy and durability of multifactorial intervention on mortality and MACEs: a randomized clinical trial in type-2 diabetic kidney disease. Cardiovasc Diabetol 2021; 20: 145.
5) Salvatore T, Pafundi PC, Morgillo F, Di Liello R, Galiero R, Nevola R, Marfella R, Monaco L, Rinaldi L, Adinolfi LE, Sasso FC. Metformin: An old drug against old age and associated morbidities. Diabetes Res Clin Pract 2020; 160: 108025.
6) Giordano M, Ciarambino T, Castellino P, Malatino L, Cataliotti A, Rinaldi L, Paolisso G, Adinolfi LE. Seasonal variations of hyponatremia in the emergency department: Age-related changes. Am J Emerg Med 2017; 35: 749-752.
7) Skeppholm M, Friberg L. Adherence to warfarin treatment among patients with atrial fibrillation. Clin Res Cardiol 2014; 103: 998-1005.
8) Minutolo R, Sasso FC, Chiodini P, Cianciaruso B, Carbonara O, Zamboli P, Tirino G, Pota A, Torella R, Conte G, De Nicola L. Management of cardiovascular risk factors in advanced type 2 diabetic nephropathy: a comparative analysis in nephrology, diabetology and primary care settings. J Hypertens 2006; 24: 1655-1661.
9) Brown MT, Bussell J, Dutta S, Davis K, Strong S, Mathew S. Medication Adherence: Truth and Consequences. Am J Med Sci 2016; 351: 387-399.

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