LETTER TO THE EDITOR

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The importance of statin therapy in atrial fibrillation patients independent of CHADS-VASc score

Cardiovascular diseases are common in patients with atrial fibrillation (AF), and imaging of the coronary arteries has not been adequately defined, especially in patients without angina pectoris. Anticoagulant treatments in order to prevent systemic embolism and rhythm/rate control treatments have been determined with clear limits in patients with AF. On the other hand, the limits of treatments that prevent plaque rupture to reduce cardiovascular events in patients with AF are unclear. From this perspective, we read with great interest the article of Ntaios *et al.*[1] in which they showed that the risk of myocardial infarction (MI) and ischaemic stroke persists in patients with AF, even under anticoagulant therapy. It was suggested by El-Battrawy *et al.*[2] that more diagnostic criteria evidence is needed to show the relationship between MI and paroxysmal AF for this study.

Rottländer *et al.*[3] performed a diagnostic coronary computerized tomography angiography (CCTA) in hospitalized patients with paroxysmal or first diagnosed AF and detected severe coronary artery disease (CAD) (causing ≥50% stenosis) in 39.2% of the patients. Moreover, 8.0% of these patients underwent percutaneous coronary intervention and 0.5% underwent coronary artery bypass grafting. In their study, Rottländer *et al.*[3] stated that (i) angina pectoris did not predict CAD in patients with AF and (ii) age, diabetes, and male gender were risk factors for CAD in these AF patients, and they recommended the use of CCTA for the diagnosis of CAD in patients with paroxysmal or first diagnosed AF.

Although the method part was criticized, the most important result of this well-designed study is that patients with first diagnosed paroxysmal AF had higher risk of acute MI compared with those with non-paroxysmal AF.[1] The fact that patients with persistent/permanent AF receive more statin therapy than patients with paroxysmal AF[4] may explain why acute MI is more common in patients with paroxysmal AF. van Rosendael *et al.*[4] stated that high left atrial epicardial fat mass without a large left atrial volume may reflect the early AF disease process, and statin therapy will contribute positively to the disease process in this respect. Although anti-inflammatory drug treatments are ongoing in large clinical trials, statin therapy is currently the only and unique option for the prevention of plaque rupture.[5]

In conclusion, statin therapy may be considered in the treatment of AF patients, regardless of the CHADS-VASc score, as increasing evidence indicates that the risk of MI and ischaemic stroke persists even under anticoagulation therapy. Conducting clinical studies on statin therapy in primary prevention of cardiovascular events, especially in AF patients without comorbid diseases such as diabetes mellitus and CAD, may contribute to the reduction of mortality and morbidity associated with this disease.

Conflict of interest: None declared.

References

1. Ntaios G, Sagris D, Buckley BJR, Harrison SL, Abdul-Rahim A, Austin P *et al.* Risk of myocardial infarction and ischemic stroke in individuals with first-diagnosed paroxysmal vs. non-paroxysmal atrial fibrillation under anticoagulation. *Europace* 2023;**25**:euad143.
2. El-Battrawy I, Hamdani N, Akin I. The link between ischaemic stroke, ischaemic heart disease, and atrial fibrillation. *Europace* 2023;**25**:euad250. doi:10.1093/europace/euad250.
3. Rottländer D, Saal M, Degen H, Gödde M, Horlitz M, Haude M. Diagnostic role of coronary CT angiography in paroxysmal or first diagnosed atrial fibrillation. *Open Heart* 2021;**8**:e001638.
4. van Rosendael AR, Smit JM, El'Mahdiui M, van Rosendael PJ, Leung M, Delgado V *et al.* Association between left atrial epicardial fat, left atrial volume, and the severity of atrial fibrillation. *Europace* 2022;**24**:1223–8.
5. Bom MJ, van der Heijden DJ, Kedhi E, van der Heyden J, Meuwissen M, Knaapen P *et al.* Early detection and treatment of the vulnerable coronary plaque: can we prevent acute coronary syndromes? *Circ Cardiovasc Imaging* 2017;**10**:e005973.

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