LETTER TO THE EDITOR

CLINICAL CARDIOLOGY WILEY

Response to the Letter: The NT-proANP puzzle - a small piece that makes the big picture

To the Editor,

The challenges related to prediction of low voltage areas (LVAs) remain important for clinicians and scientists. Therefore, we appreciate the interest demonstrated by Floria and colleagues regarding our paper.[1]

Based on our previous investigation, prediction of electro-anatomical substrate before catheter ablation seems to be more important for individualized AF management than arrhythmia recurrences, which partly depends on ablators' experience and follow-up strategies.[2] However, we agree that late gadolinium enhancement (LGE) and presence of LVAs do not necessarily overlap. Indeed, there are some technical issues and anatomical challenges for the electro-anatomical mapping. Thus, LGE assessment could be challenging by differences in image acquisition and post-processing protocols as well.[3] Despite being a gold standard for imaging modality in cardiology, cardiac magnetic resonance (CMR)-derived LA parameters are comparable with echocardiographic measurements.[4] Also, randomized studies clearly favoring LGE as an ablation target have not been published yet, and the results still remain inconsistent.

AF causes multifactorial pathophysiological changes mirrored by alteration in left atrial (LA) anatomy and function, impaired atrial conduction, and disturbances in blood biomarkers' profiles just to name few. Importance of LA volume[5] and LA function[6] for LVAs prediction had been already shown. Floria et al hypothesize that NT-proANP secretion might decrease due to less secreting myocardium caused by increase of LA volume and LVAs presence. However, our previous findings clearly contradict this assumption, as we were able to show almost a linear increase in the NT-proANP levels accordingly to four AF progression phenotypes.[7] Similar association was found not only for echocardiographic LA volume,[7] but also for CMR-derived LA size.[5]

In summary, further research elucidating non-invasive prediction of LVAs presence is clearly needed. Advanced imaging modalities, high-fidelity ECG, and/or specific blood biomarkers should be implemented into individualized AF management and disease prevention.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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