## ARCHIVES OF THE TURKISH SOCIETY OF CARDIOLOGY



## P Wave Index and Atrial Fibrillation Recurrence

P Dalgası İndeksi ve Atriyal Fibrilasyon Nüksü

Dear editor,

We recently read with keen interest a novel study of an effective novel index of P wave duration-to-amplitude ratio for predicting the recurrence of atrial fibrillation ablation by Doğduş et al.<sup>1</sup> It was such excellent work to explore the likelihood of atrial fibrillation (AF) recurrence after the ablation procedure using a simple parameter. Previous studies had investigated the risk factors for recurrence, such as age, persistent AF,<sup>2</sup> left atrial diameter,<sup>3,4</sup> and atrial remodeling using delayed enhancement magnetic resonance imaging<sup>5</sup>, however, with a lack of sensitivities and specificities. Some minor drawbacks need to be addressed in this current study.

In our understanding, based on the protocol presented in the study, P wave morphology was measured single time following the ablation procedure by a 12-lead electrocardiogram (ECG) and the electrophysiology (EP) system. To the best of our knowledge, the emergence and visibility of P wave following ablation are a subject of debate, with the possibility of changing its morphology days to months after ablation.<sup>6</sup> We assume that the P wave parameter needs to be measured several times to obtain reliable numbers. The authors should also explain why the duration and amplitude of the P wave were only measured in lead II, as several other studies measured P wave indices using the maximum (longest) duration in 12-lead ECG.<sup>7.8</sup>

Declaration of Interests: The authors declare that they have no competing interest.

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## **LETTER TO THE EDITOR** EDITÖRE MEKTUP



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