



## Interatrial Block and the Risk of Ischemic Stroke

We read with great interest the paper by Wu *et al.*<sup>1)</sup> regarding the usefulness of CHADS2 and CHA2DS2-VASc scores to predict the risk of ischemic stroke or transient ischemic attack in patients with interatrial block without atrial fibrillation. This interesting study is in line with previous results<sup>2, 3)</sup> suggesting a relation of advanced interatrial block with an increased risk of ischemic stroke. These findings open the door to the use of anticoagulation therapy in patients interatrial block<sup>4)</sup>, particularly in those with high CHADS2 and CHA2DS2-VASc and Bayes syndrome (advanced interatrial block associated with atrial fibrillation)<sup>5)</sup>. We appreciate the important contribution of the present study, and we would like to point out two essential issues when studying the ECG of patients with interatrial block. The first is the need to differentiate advanced from partial interatrial block. In both blocks, the P wave duration is  $\geq 120$  ms; but in the typical cases of advanced block, there is also a biphasic pattern in leads II, III, and aVF<sup>6)</sup> (**Fig. 1**). This is an important distinction as the association of this type of interatrial block with supraventricular arrhythmias and ischemic stroke is higher than with partial interatrial block<sup>2, 3, 7, 8)</sup>. The second issue is how to measure the P wave duration. The correct method is to measure the difference between the start of the P wave in the earliest lead where it appears and to finish in the last one (**Fig. 2**). To interpret the ECG on the computer, we use a program called GeoGebra. GeoGebra is available on multiple platforms with its desktop applications for Windows, Mac OS, and Linux. It allows defining points on an image, trace lines, and segments. We have done a series of measurements on ECG grids with this application that allow us to say that the error of our method is 0.063%.

### Conflict of Interest

The authors have no conflict of interest.

Address for correspondence: Manuel Martínez-Sellés, Calle Doctor Esquerdo, 46, Hospital General Universitario Gregorio Marañón, 28007 - Madrid, Spain.

Email: mmselles@secardiologia.es

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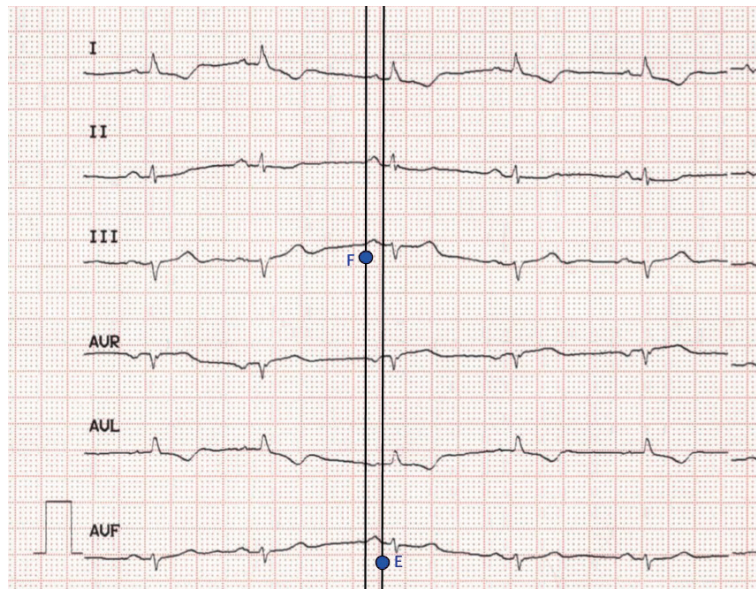
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**Fig. 1.** Advanced interatrial block with P wave duration  $\geq 120$  ms and a biphasic pattern in leads II, III, and aVF

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**Fig. 2.** The method to measure the P wave duration is to quantify the difference between the first (F) start of the P wave and the end (E) in the last one

In this case, lead III is the lead that shows first the start of P wave and lead VF is the last one that records the end of P wave.

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Manuel Martínez-Sellés<sup>1</sup>,  
Luis Alberto Escobar Robledo<sup>2</sup> and  
Adrian Baranchuk<sup>3</sup>

<sup>1</sup>Hospital General Universitario Gregorio Marañón y Universidad Europea y Universidad Complutense, Madrid, Spain

<sup>2</sup>Fundació Investigació Cardiovascular, ICCV, Barcelona, Spain

<sup>3</sup>Queen's University, Kingston, Ontario, Canada