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<https://doi.org/10.1016/j.recesp.2023.11.017>

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Circadian pattern of heart rate in patients with heart failure. Response



Patrón circadiano de la frecuencia cardíaca en pacientes con insuficiencia cardíaca. Respuesta

To the Editor,

We thank Báez-Ferrer and Domínguez-Rodríguez for their comments on our article.¹ A number of studies have used ambulatory blood pressure monitoring (ABPM) to evaluate nocturnal heart rate. In general, the higher the rate and the smaller its decrease compared with daytime values, the greater the risk of cardiovascular events. Most studies that have evaluated heart rate using ABPM measurements have been conducted in normotensive or hypertensive patients without established cardiovascular disease.² A number of studies, however, have found a link between adverse cardiovascular events and elevated nocturnal heart rate based on data from implantable cardioverter-defibrillators.^{3,4} The aim of our study was to determine the prevalence of diurnal blood pressure patterns (controlled, uncontrolled, white coat, and masked hypertension) and nocturnal dipper, nondipper, and reverse dipper patterns in patients with different heart failure phenotypes (heart failure with reduced, slightly reduced, or preserved left ventricular ejection fraction). We decided not to include a heart rate analysis to avoid overloading the reader with information. In this regard, however, 2 key aspects of the population studied should be taken into account when interpreting our results: a) just 57.9% of the patients were in sinus rhythm, and b) 87.2% were taking beta-blockers and 9% were taking ivabradine.

We appreciate the practicalities of assessing heart rate in ABPM studies, but believe that there are other, more convenient methods, such as Holter monitors, subcutaneous ECG monitors, and cardiac pacing devices. Notwithstanding, considering the scarcity of data on nocturnal heart rate variability in patients with heart failure, any new research that could help improve risk estimation and guide treatment adjustments will be very welcome.

FUNDING

No funding was received.

USE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence was not used to produce this article.

AUTHORS' CONTRIBUTIONS

All the authors contributed equally to this document.

CONFLICTS OF INTEREST

The authors declare that they do not have any conflicts of interest in relation to this article.

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Available online 16 March 2024

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