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CONFLICTS OF INTEREST

None.

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New research avenues for the prognostic value of the Tpeak-Tend interval in patients with different morphological variants of tako-tsubo syndrome. Response

Nuevas vías de investigación para el valor pronóstico del intervalo onda Tpeak-Tend *en pacientes con diferentes variantes morfológicas del síndrome de* tako-tsubo. *Respuesta*

We are very grateful to have received Prof Madias's comments on our article,[1] as his observations are extremely pertinent and of great clinical significance.

Regarding the automatic calculation of the Tpeak-Tend interval, we are developing an algorithm that might enable us to obtain a readily available measurement in normal electrocardiographs (ECG), like those for QTc. The technical challenge lies in the interpretation of the variability of the T wave patterns, especially in suboptimal ECG recordings. However, following Prof Madias's suggestion, we found a good correlation between our QT and QTc measurements on admission and at 48 hours and the values provided by our ECG recording machine (EL 280 Resting Electrocardiograph, Welch Allyn, United States). Indeed, the intraclass correlation coefficient values were between 0.821 and 0.876, thus showing the specific possibility of pursuing this issue successfully.

Regarding the other important point on the analysis of the distinct *tako-tsubo* variants with respect to ECG repolarization parameters, in our population, we have detected 66 patients with the apical form, 1 with the inverse form, 16 with the mid-ventricular form, and 2 with the focal form, as indicated in table 4 of the supplementary data[1]. According to Prof Madias's suggestion, we have evaluated ECG repolarization parameters among the 4 variants on admission and at 48 hours, including both the different electrocardiographic configurations described in the paper ("global", "precordial" and "in limb leads") and individual values. We found no statistically significant differences among the 4 groups. However, when we compared the apical and mid-ventricular variants only (the most conspicuous in terms of patient numbers), we found a trend toward higher values of the corrected global Tpeak-Tend in the apical variant group at 48 hours (113 ± 29 ms vs 105 ± 23 ms; $P = .370$). The latter was driven by the corrected precordial Tpeak-Tend (119 ± 28 ms vs 102 ± 19 ms; $P = .112$). Conversely, the corrected Tpeak-Tend in limb leads showed no relevant differences between apical and mid-ventricular variants (105 ± 35 ms vs 105 ± 34 ms; $P = .991$). We also evaluated each lead individually at 48 hours, without finding any statistically significant differences between the 2 groups.

These results were probably influenced by the small sample size of the groups and should also be complemented by cardiac magnetic resonance at 48 hours. All together, this would allow effective evaluation of the relationship among regional variants, edema and repolarization dispersion.

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AUTHORS' CONTRIBUTIONS

G. La Rosa and G. Pelargonio drafted the article. ML. Narducci, and F. Crea revised the article critically for important intellectual content. All authors approved the final version.

CONFLICTS OF INTEREST

None.

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