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Response to the letter

We thank Dr. Verrier for taking a keen interest in our paper and writing to present his views on the current status of T wave alternans (TWA) measurement using the modified moving average (MMA) method. We used the spectral method in our study and found no association of measured TWA with sudden death. While we did not use the MMA method, we mentioned that one of the barriers in using this in the clinical setting was absence of a single, widely accepted threshold for abnormality.

Measured TWA with the MMA method appears to vary with the measurement condition and even with heart rate [1]. Many of the studies have reported widely varying sensitivity and specificity when using a single cut-off and have often applied a retrospectively defined cut-off that is different from the most widely used 47 μ V. In the consensus statement referred to by Dr. Verrier [2], in table 2 listing the various studies, cut-off values of 47 μ V, 60 μ V and 65 μ V have been reported in different studies. In addition, one study used a cut-off of 5uV after noise subtraction [3]. Using a more sensitive measure of 20 μ V has also been suggested in patients at higher risk [1]. It has also been reported that with a cut-off of 47 μ V, positive measurements may be obtained in many normal persons and may need manual over-reading to eliminate false positives [4].

Based on these, we feel that with the existing evidence it is not entirely clear if measurements made with the MMA method are better treated as a continuous variable or as a binary variable, if the cut-off should be a single pre-specified value or should vary with the recording condition, heart rate and desired sensitivity, and if some form of noise correction should be used. Towever, we agree with Dr. Verrier that attempts at standarization have been made and evidence is accumulating with studies prospectively using these cut-offs.

Disclosures

No disclosures

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Raja J. Selvaraj Department of Cardiology, JIPMER, Puducherry, India

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