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Letter to the Editor

How to improve patient response to cardiac resynchronization therapy?

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I read the study by Strik et al. [1] about the application of activation delay vector (ADV) obtained by electrocardiographic mapping (ECM) to identify the electrical substrate for cardiac resynchronization therapy (CRT) with great interest. However, the authors neglected to discuss important findings that did not support their results and other simpler methods that might improve patient selection for CRT. In contrast to the authors' results based solely on acute response to left ventricular (LV) pacing optimization, echocardiographic latest peak radial strain-guided LV lead placement improved patient outcomes compared with conventional LV pacing in two prospective randomized studies [STARTER [2], TARGET [3]] using hard clinical endpoints. Furthermore, in disagreement with their current results, some of the authors previously reported [4] delayed LV lateral wall activation in only half of nonspecific intraventricular conduction disturbance (NICD) patients. Regarding surface ECG parameters useful to identify the electrical substrate, the authors mention QRS duration and morphology, but not our two novel surface ECG dyssynchrony criteria [5] that also improved the prediction of CRT response only in patients with NICD, but not with left bundle branch block (LBBB) patterns. All NICD patients with electrical dyssynchrony absent diagnosis established by the novel ECG dyssynchrony criteria were nonresponders, whereas those with electrical dyssynchrony present diagnosis had as good a chance to become responders as patients with LBBB. Our ECG dyssynchrony criteria are less accurate but much simpler, cheaper and quicker than ECM, and available at bedside, however, their value needs to be verified by independent investigators.

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Conflict of interest

None.

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