Letter by Obeyesekere Regarding Article, “Functional Pace-Mapping Responses for Identification of Targets for Catheter Ablation of Scar-Mediated Ventricular Tachycardia”

To the Editor:

The elegant study by Tung et al1 presents additional sites for ablation of scar-based ventricular tachycardia (VT). Pace-mapped induction sites predicted successful sites of termination during ablation. This study raises a hypothesis that pace-mapped induction may be viewed as a surrogate for entrainment.

At induction as with the end of entrainment, when pacing within the scar and the exit site after the last paced impulse at induction is the same as the induced/entrained VT, conduction follows the same route, and the return cycle to the site of pacing may also be similar. Thus, the postpacing interval after entrainment may be the same as the postspacing interval measured from the last pacing stimulus that initiates VT (postspacing intervalinitiation). Similarly, the stimulus-QRS interval that initiates VT or during pacing is because of the same distance as the stimulus-QRS interval during entrainment if the exit is the same. In fact, the authors report that 71% of critical isthmus sites had a stimulus-QRS during pacing minus electrogram-QRS interval of <30 ms. Thus, the cycle at induction may provide comparable information to that derived after entrainment.2 This assumption can be confounded by decrement and concealed conduction at initiation, and remote site pace mapping may match VT morphology in up to 29% of sites.3 Could the authors provide data on analysis of the postpacing intervalinitiation minus tachycardia cycle length at pace-mapped induction sites, both when the last paced beat matched the VT and when it did not? Data on analysis of entrainment mapping at the 21 pace-mapped induction sites would also be valuable.

Disclosures

None.

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References

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