Simple is Complicated

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"You always write saying simple, simple, simple, and I do my best to oblige... but simple is complicated!" This was Ludwig van Beethoven's response to the Scottish music publisher George Thomson who commissioned folksong arrangements from the great composer – but often requested that they be simplified.

Biventricular pacing has been the cornerstone of an invasive approach for the treatment of patients with heart failure and left bundle branch block. The procedure has proven efficacy but it is technically demanding, time-consuming and has inherent limitations especially concerning the pacing thresholds of the coronary sinus lead. Selective His bundle and left bundle pacing have emerged as potential alternatives providing equal if not better haemodynamic improvements.[1–3] However, these approaches may be cumbersome and demand a far from negligible learning curve. Furthermore, infra-Hisian block or peripheral intraventricular conduction delay and long-term durability of the pacing lead may hinder successful His-bundle or left-bundle pacing.

Theoretically, a mid-septal position should also be an optimum pacing site in the normal ventricle, and simple septal pacing appears to be a user-friendly, widely applicable solution, as Heckman et al. claim in this issue of the journal.[4–6] This could be the answer to the quest not only for cardiac resynchronisation, but also for 'physiological' pacing, especially in young patients with congenital heart block who may need lifelong pacing on the left ventricle.

Is this solution too simple not to be complicated? The differences between selective and non-selective His bundle pacing and the potential caveats of a non-selective approach have been well addressed by the pioneers of the technique and are also discussed by Heckman et al.[6] Further, although theoretically a mid-septal position should be the optimum site in the normal ventricle, no benefit over apical pacing has been shown in randomised studies, but there has been no long-term follow-up, especially in the paediatric population.[4,5,7,8] Last but not least, the effectiveness of a septal approach for patients with extensive septal scars post-infarct is questionable if not unattainable. I remember Mark Josephson in our morning rounds teaching us that after an anteroseptal infarct, any attempt to 'normalise' pacing is detrimental.

We are entering a new, exciting era where the normal activation mode is being replicated using physiological pacing. However, we have a long way to go before reaching our goal. Simple is always complicated. ❑

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