

Perspective

Future in Physiological Pacing? State of the Art

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I have read recently some papers about sophisticated methods for cardiac pacing [1]. Here are some comments and present perspectives.

Physiological pacing as a new paradigm has been the subject of papers from a good number of authors for many years. In my particular case I have been witness of discussions within the global electrophysiology community about the best pacing site in terms of physiological pacing and the future of cardiac resynchronization therapy [2].

It is well known that different physiological pacing modalities are being used: selective His bundle pacing S-HBP), non-selective His bundle pacing or NS-HBP (which we prefer to call para-Hisian pacing) and more recently left bundle branch pacing (LBBP).

There is an ongoing evolution on the reasons for using different pacing techniques and electrode site, among them long-term safety. In my opinion S-HBP is neither the safest nor the most effective in patients with conduction disturbances. This technique is losing preference and this is the reason for the wider use of LBBP trying to avoid the known difficulties of S-HBP. However, there is not enough experience with LBBP at the moment.

The third option is NS-HBP or para-Hisian pacing. There is still some resistance to use it due to the lack of specific reference about the optimal pacing site. In our group we use the so-called SynchroMax mapping for para-Hisian pacing. It is a simple and effective technique to achieve the best lead location [3].

The paper that we are commenting here [1] shows a tri-dimensional mapping for optimal lead placement, others look for His positioning using a recording from the catheter, but the reason for the existence of so many techniques shows that none of them is generically accepted.

In our South American region we are using the above mentioned system, based in the ECG without the need of special tools, sheaths or navigators; this is important here due to the lack of huge resources in the healthcare system. This noninvasive method also allows an important reduction in implant time which is in turn a good safety issue because we reduce the infections risks.

My purpose is to acknowledge the initiative shown in this paper and to contribute with new tools.

Time will tell which the best pacing time is, but in general I believe that the future will be para-Hisian pacing aided with the most convenient mapping method, good for all patients including those with conduction disturbances or heart failure.

References

1. Bastian D, Gregorio C, Buia V (2022) His bundle pacing guided by automated intrinsic morphology matching is feasible in patients with narrow QRS complexes. *Sci Rep* 12: 3606.
2. Ortega DF (2019) Is Traditional Resynchronization Therapy Obsolete? Is Para-Hisian Pacing the New Paradigm? *Editorial by Rev Electro y Arritmias* 11: 38-40.
3. Daniel O, Emilio L, Analía P, Nicolás M, María Paula Bonomini MS (2020) Novel implant technique for septal pacing. A noninvasive approach to nonselective his bundle pacing *Journal of Electrocardiology* 63: 35-40.

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