Review of: "His bundle pacing guided by automated intrinsic morphology matching is feasible in patients with narrow QRS complexes"

daniel ortega

Potential competing interests: CMO, NewStim, Inc., USA

I have read with interest the article "His bundle pacing guided by automated intrinsic morphology matching is feasible in patients with narrow QRS complexes" by Dirk Bastian, Caterina Gregorio, Veronica Buia, Janusch Walaschek, Harald Rittger and Laura Vitali-Serdoz[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 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 is the best pacing time, 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.

Daniel Felipe Ortega, MD
Head of Arrhythmia Unit, Clinica San Camilo, Buenos Aires, Argentina
Conflict of interest: CMO, NewStim, Inc., USA

References

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