About the Micra Transcatheter Pacing System

Acerca del sistema de marcapasos transcatéter Micra

To the Editor,

We read in detail the interesting article by Pachón et al on implantation of the Micra transcatheter pacing system. Due to its characteristics, this model could undoubtedly be extremely useful in certain patients. However, it has certain limitations. Regarding the series of 10 patients presented, we would like to make several observations:

Of the 10 patients, 2 (patients 5 and 8) were in sinus rhythm prior to implantation; usually, implantation with a DDD pacemaker would be indicated in this situation. With right ventricular pacing only, atrial fibrillation is likely to develop in the medium- to long-term. This is particularly likely in the case of the patient with a pacing percentage of more than 20%, as measured after implantation. Aside from the clinical deterioration that could result from the loss of atrioventricular synchrony, the patient would require anticoagulation. In the case of the other patient with a baseline sinus rhythm, the R wave amplitude was only 4.7 mV after the first implantation, whereas the manufacturer’s recommendation is ≥ 5 mV.

Patients 1 and 2 have a pacing threshold of 0.24 ms higher than the manufacturer’s recommendation in the technical specifications (1 mV).

Regarding the patient with a QRS of 140 ms and erratic control of atrial fibrillation (patient 4), it is possible that at follow-up she will require a change to cardiac resynchronization therapy (provided the clinical profile indicates and allows this). With this system, such a change would not be feasible and could even hamper implantation of new electrocatheters in the right ventricle.

In light of these points, this seems to be an interesting and novel pacing system, but with some limitations, especially for patients who are in sinus rhythm or who require a change to cardiac resynchronization at follow-up.

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