Dear Readers,

This issue of the Journal contains many interesting articles. I would like to highlight the one by Singh et al. entitled Multipoint Pacing Therapy in Cardiac Resynchronization Therapy Non-responder Patient. The authors describe the case of a patient with a history of severe ischemic cardiomyopathy and a left ventricular ejection fraction of 21%, who underwent the implantation of a biventricular ICD as a part of a clinical study. Initially conventional biventricular pacing was performed followed by multipoint (MPP) programming at 3 months. The patient failed to respond to conventional cardiac resynchronization therapy and had a heart failure hospitalization while undergoing biventricular pacing. Interestingly, there was a marked clinical and echocardiographic response when MPP cardiac resynchronization was turned on.

The rate of non-responders with conventional biventricular pacing has been reported to be as high as 30% in some studies. Many techniques and technologies have been developed with the aim of reducing the rate of non-responders. One of these technologies is multipoint pacing, the idea of which is not new. In 2007, Yoshida et al. demonstrated the superiority of pacing from 2 RV leads and an LV lead when compared to conventional biventricular pacing. Other studies that followed confirmed the early findings and showed the benefit of using 2 LV leads. All these early studies however employed multiple leads in the ventricles which can be cumbersome. More recently multisite pacing from one LV lead became available and many studies showed its benefit, including the MORE-CRT study. Studies enrolling a small number of patients showed that multisite is associated with improved dP/dt, QRS duration, NYHA class, LV dimension, LV EF, and LV dyssynchrony. The largest study in this field is the MultiPoint Pacing (MPP) IDE Study, which enrolled close to 500 patients. The study met its primary end point of non-inferiority of MPP when compared to conventional biventricular pacing and showed that MPP with > 30 mm cathode spacing improved responder rate.

The studies mentioned above and others clearly highlight the possible important role of multisite pacing in improving cardiac resynchronization therapy. It is crucial however to remember that this is a relatively new technology and more prospective studies are needed to better understand its value and define the patient population where it would be most beneficial.

As always, I hope that you find this issue of the journal beneficial to you and your practice.

Regards,

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