Appropriate Use Criteria for Cardiopulmonary Exercise Testing in Patients With Cardiac Resynchronization Devices. Response

Criterios de uso apropiado para la ergoespirometría en el paciente portador de dispositivos de resincronización cardiaca. Respuesta

To the Editor,

We wish to thank Dr. Dominguez-Rodriguez and Dr. Abreu-Gonzalez for their interest and comments regarding our publication.

Cardiopulmonary exercise testing is a functional test of indisputable value in patients with cardiac resynchronization therapy (CRT) devices since, in addition to enabling objective evaluation of the functional response to treatment, it also provides prognostic information, an input that eventually could have therapeutic implications. Treadmill exercise testing is far more limited in the functional and prognostic assessment of patients with CRT devices and, in this respect, we are in complete agreement.

However, the objective of our study was not to carry out a strictly functional assessment, much less a prognostic evaluation, of patients receiving CRT. This study was prospectively designed to determine the number of patients who experienced a loss of pacing capture during exercise, analyze the causes, and attempt to correct them, because nearly constant pacing is considered to be essential for achieving a response to therapy.^{1–3}

The results obtained indicate that pacing capture was lost during exercise in 24% of the patients, which led to a process of clinical decision making to correct it. Thus, we concluded that treadmill exercise testing is a simple, accessible, and useful tool for follow-up of patients with CRT, and helps to guide clinical decisions related to drug therapy, device programing, and indications for atrioventricular node ablation.⁴

Given the small sample size, it is not possible to conclude from our report that exercise testing should be systematically employed in all the patients receiving CRT. However, we firmly believe that it can be highly useful in the assessment of certain patients, such as nonresponders or those who have atrial arrhythmias as the baseline rhythm.

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REFERENCES

- Koplan BA, Kaplan AJ, Weiner S, Jones PW, Seth M, Christman SA. Heart failure decompensation and all-cause mortality in relation to percent biventricular pacing in patients with heart failure. Is a goal of 100 necessary? J Am Coll Cardiol. 2009;53:355–60.
- Hayes DL, Boehmer JP, Day J, Gilliam FR, Heidenreich PA, Seth M, et al. Cardiac resynchronization therapy and the relationship of percent biventricular pacing to symptoms and survival. Heart Rhythm. 2011;8:1469–75.
- Gasparini M, Auricchio A, Regoli F, Fantoni C, Kawabata M, Galimberti P, et al. Four-year efficacy of cardiac resynchronization therapy on exercise tolerance and disease progression: the importance of performing atrioventricular junction ablation in patients with atrial fibrillation. J Am Coll Cardiol. 2006;48: 734–43.
- 4. De Riva-Silva M, López Gil M, Fontenla-Cerezuela F, Salgado-Aranda R, Salguero-Bodes R, Arribas-Ynsaurriaga F. Utilidad de la ergometría convencional en el seguimiento de pacientes portadores de dispositivos de resincronización cardiaca. Rev Esp Cardiol. 2013;66:908–15.

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Comments on the Analysis of Telephone Calls to a Heart Failure Unit: Reasons for the Call and Resource Use

CrossMark

Comentarios al análisis de la demanda telefónica en una unidad de insuficiencia cardiaca: motivos de consulta y utilización de recursos

To the Editor,

We read with great interest the scientific letter published by González et al¹ in *Revista Española de Cardiología*, and, after first congratulating the authors, would like to make several comments on its content.

We know that heart failure is a complex and multifactorial syndrome that affects a high percentage of patients. Moreover, the number of patients is increasing due to the progressive aging of the population. Clinical practice guidelines recommend the implementation of multidisciplinary programs as a priority.² One of the keys to the success of these programs lies in health education interventions, essentially carried out by nurses, as reflected by several studies.³ Given their high workload, physicians have less room for maneuver for dedicating more time to patients.⁴ Nurses therefore take on most of the burden of the educational process,

although without undermining the roles of other members of the team.

With regard to the published letter, we have several doubts. First, it would be interesting to know whether the nurses' telephone calls follow a predetermined structure or protocol depending on the reason for the call or whether they simply respond to the demands of the patient. Second, we would also need to know which interventions are performed by nurses, depending on the reason for the call. Finally, the number of bureaucratic questions addressed by the nurses is noteworthy and such doubts could perhaps be resolved by administrative staff.

It is our understanding that within an educational program, taking calls should be a complementary activity to other, more important interventions. In fact, telephone support has not been shown to provide a benefit and the evidence is not sufficiently solid to support recommendation in the clinical practice guidelines.²

In the figure that is published in the letter indicating the reasons for calling, we noted that patients have problems essentially with treatment. These results may suggest that the number of calls increases due to lack of a prior educational intervention on the patient' treatment plan, leading to subsequent doubts.

A substantial proportion of calls may be due to strong trust in the unit staff and their accessibility, making the patients dependent on the system. In fact, older patients call about other

