On the Cost-effectiveness of Dabigatran. Response

Sobre el coste-efectividad de dabigatrán. Respuesta

To the Editor,

We would like to respond to the considerations of the author of the letter concerning our article.[1]

With respect to the doubts about the results obtained in our study and the independence of the authors, we wish to point out that different agencies for the assessment of health technologies, such as the National Institute for Health and Clinical Excellence, as well as publications in countries in which high quality anticoagulation management is achieved with vitamin K antagonists, obtain results similar to ours. This fact is of great importance in the inclusion of dabigatran in different clinical practice guidelines and its addition to the range of health care services provided in a number of countries in Western Europe.

The cost quoted for international normalized ratio monitoring was obtained from a study performed by the *Institut Català de la Salut*,[2] and a sensitivity analysis was carried out in which modifying this cost produced no changes in the results.

The cost evaluation presented by the author is incomplete[3]; among other items, he does not consider the total cost of the treatments, since the cost of events and of the resources consumed (stroke, bleeding, rehabilitation, and follow-up, in cases of dependence) are not included. An approach of this type would only be applicable when dealing with treatments having the same efficacy and safety, and cost minimization analysis should be employed.

The author considers that cost-effectiveness studies should be carried out by independent organisms, rather than by pharmaceutical companies. The key in this issue is that the economic evaluation of health technologies should be performed, in a meticulous and standardized way, by all the agents involved, including the pharmaceutical companies. This is a complex process that is undergoing continuous development, under the leadership of relevant authors and scientific organizations and the International Society for Pharmacoeconomics and Outcomes Research, and reflected in the guidelines of the international evaluation agencies utilized as referents by national health systems and pharmaceutical companies in general.

We would like to conclude by saying that a number of the assertions of the author are based on subjective impressions, are compromised by an incomplete economic evaluation, and have not been checked against results available in other countries of Western Europe, which are very similar to ours in Spain.

CONFLICTS OF INTEREST

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Exercise Echocardiography in Hypertrophic Cardiomyopathy: Is Upright Evaluation Needed After All?

Ecocardiografía de ejercicio en pacientes con miocardiopatía hipertrófica. ¿La evaluación ortostática es necesaria después de todo?

To the editor,

In the paper published by de la Morena et al.,[1] the authors state that "in patients with hypertrophic cardiomyopathy, left ventricular outflow tract obstruction and left atrial volume are the main predictors of exercise capacity. Exercise echocardiography is a better predictor of functional performance than at-rest echocardiography, although its predictive power is under 50%." These findings provided valuable insights into the determinants of functional impairment in hypertrophic cardiomyopathy (HC) and support the potential value of exercise echocardiography in the clinical assessment of all patients with HC. We wish to congratulate the authors in their efforts to disseminate data on the value of exercise echocardiography in the study of patients with HC, and on their very important clarification regarding the mechanism of obstruction and the evaluation of functional capacity in their study with the determination of oxygen consumption.

The results that they obtained, as stated, have a predictive power of under 50% and this may be eventually attributed to not only the multiple factors that influence the functional capacity in this pathology, but also to the fact that the obstructive character of the HC patient has been underestimated. The authors evaluated the gradients only in the left lateral decubitus before and after exercise. As we have shown previously, the number of patients that are obstructive and the magnitude of obstruction are different when echocardiography is done during all forms of exercise,[2] and if after exercise the patients are still maintained in an orthostatic position.[3,4]

The importance of upright evaluation during and particularly after exercise was recently underscored by Dimitrow and Cheng,[5] and we continue to think that laying the patients supine after any type of exercise is meaningless from the clinical point of view because this doesn't happen usually in real life.

Last, according to previous publications,[2,3] upright evaluation before exercise detected some patients with obstruction, a fact that was not present or was not presented in this paper. The reduction of preload in the upright position is an important stimulus for inducing left ventricular outflow tract obstruction, not only in HC but also in other conditions.[5,6]

Tome Esteban,[7] in an editorial referring to the present paper, also underscored the importance of the use of a protocol that maximizes the factors that provoke obstruction in HC patients.

We think that future guidelines of scientific societies should clearly recommend an uniform methodology to be employed by all groups that study and treat this class of patients with the purpose that a common language may be used by all study groups in the future.

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Exercise Echocardiography in Hypertrophic Cardiomyopathy: Is Upright Evaluation Needed After All? Response

Ecocardiografía de ejercicio en pacientes con miocardiopatía hipertrófica. ¿La evaluación ortostática es necesaria después de todo? Respuesta

To the Editor,

The authors of the letter state that patient evaluation during exercise in an upright position may provide the most sensitive detection of latent obstruction in patients with hypertrophic cardiomyopathy. On the basis of this observation, they point out the possibility that our study[1] may have underestimated the number of patients with obstructive forms. Their reasoning is based on 2 reports[2,3] involving a small number of patients (17 and 37, respectively) who underwent submaximal tests. In these tests, the authors observed, in just 7 cases, that the obstruction was detectable only after exercise in an upright position and disappeared within a few seconds of changing to the supine position.

We carried out symptom-limited tests and prefer the decubitus position, since we evaluate diastolic flow and left ventricular outflow tract flow. Our method enables us to obtain 2-dimensional and Doppler images within a little over 1 min after exercise. Knowing that the obstruction is fleeting, we always begin with color-guided continuous wave Doppler. In some cases, the obstruction may have disappeared; however, in the absence of sound comparative studies with maximum exercise tests that reveal the frequency of this event and time elapsed before it occurs, we consider it quite unlikely that an obstruction occurred in a significant number of our patients.

Nevertheless, and taking into account our results demonstrating that it is more important to determine the presence of obstruction than to quantify the degree,[1] we have modified our protocol and, coinciding with the authors of the letter, we focus on evaluating the presence of obstruction at peak exercise and during the immediate postexercise period, maintaining the upright position.

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