Letters to the Editor

Coronary Artery Dominance as a Prognostic Factor: In Anterior Myocardial Infarctions as Well?

Dominancia coronaria como factor pronóstico: ¿también en infartos anteriores?

To the Editor,

We read with interest the article by Abu-Assi et al.1 on the impact of left coronary dominance on prognosis in the context of ST-segment elevation myocardial infarction and, in addition to wishing to congratulate the authors for the contribution it represents, as well as on their elegant statistical analysis, we consider it appropriate to put forward certain considerations.

Although the available data are limited, it is reasonable to think that the occlusion of a coronary artery could have a stronger impact in a patient with 2 major vessels (left dominance) than in a patient with 3. This is the point that the above-mentioned article makes in the conclusions, which can undoubtedly have a simple practical application. Nevertheless, it might be interesting to know whether the prognostic influence of the dominance pattern is maintained specifically in the group of patients with involvement of the anterior descending artery (anterior myocardial infarctions) and, if so, to examine whether its importance is greater or lesser than when the myocardial infarction affects the territory of the circumflex artery (the segments in question when dominance is discussed). In addition, it would also be interesting to know whether, after stratification for the severity of ventricular dysfunction, coronary dominance would still be a relevant prognostic factor to be considered from the clinical perspective.

Iván J. Núñez Gil,* Gisela Feltes, and Antonio Fernández-Ortiz
Servicio de Cardiología, Hospital Clínico San Carlos, Madrid, Spain

*Corresponding author:
E-mail address: ibnsky@yahoo.es (I. J. Núñez Gil).
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Coronary Artery Dominance as a Prognostic Factor: In Anterior Myocardial Infarctions as Well? Response

Dominancia coronaria como factor pronóstico: ¿también en infartos anteriores? Respuesta

To the Editor,

We sincerely appreciate the interest of Núñez Gil et al and their comments concerning our article.1

In our study, the prognostic impact of the pattern of dominance on overall mortality, as well as on the occurrence of reinfarction during follow-up, was adjusted for the location of the infarction (anterior vs other sites) and left ventricular systolic dysfunction (which, to avoid collinearity in the constructed models, was defined as Killip class ≥ II or a left ventricular ejection fraction < 40% for the mortality analysis using the Cox model and as Killip class > II or a left ventricular ejection fraction < 35% for the final multivariate analysis using the competing risks model of Fine and Gray).2 Thus, the prognostic impact and effect size of the coronary dominance pattern on the events death and reinfarction was estimated taking into account the important prognostic factors mentioned by Núñez Gil et al. For this reason, we believe that the coronary dominance pattern should be a relevant prognostic factor to be considered in the clinical setting for long-term risk stratification in patients with ST-segment elevation myocardial infarction.

Emad Abu-Assi,* Sergio Raposeiras-Roubin, and José Ramón González-Juanatey
Servicio de Cardiología y Unidad Coronaria, Hospital Clínico Universitario, Santiago de Compostela, A Coruña, Spain

*Corresponding author:
E-mail address: eabuassi@gmail.com (E. Abu-Assi).
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