

Atrium

In this issue, Fernando A. Navarro discusses differences in linguistic register between Spanish and English in medical language. The different roots of the 2 languages explain why, for example, the term *cardiopatía* is a specialized term in Spanish, while the term *cardiopathy* is considered an excessively formal—even pedantic—term and is rarely used in English.

Among the editorials, Alter and Yu have written an interesting commentary on an original article by Pérez-Hernández et al., published in the same issue, analyzing the distribution of the main cardiovascular risk factors by the socioeconomic level of adults older than 60 years in a subanalysis of the ENRICA study. After adjusting for age and sex, Pérez-Hernández et al. found a substantial gradient between socioeconomic level and cardiovascular risk factors and established cardiovascular disease among Spanish seniors. Because socioeconomic status was established through a telephone interview, with higher socioeconomic groups being more likely to respond, there is obviously a possibility of selection bias; nevertheless, that does not invalidate the main finding of the study, namely, that there are marked inequalities in health in this population group. To my mind, Alter and Yu provide a deep and judicious reflection on the *inheritance received* in terms of total cardiovascular risk, affecting mainly the most disadvantaged socioeconomic groups. These authors stress the complexity of the causal mechanisms giving rise to this enhanced risk, and consequently most cardiovascular events occur in the most vulnerable populations and this increased risk is passed on to subsequent generations in these groups. Moreover, the complex causal chain—in which both individual and group factors intervene—leads to these events being more severe and having a worse prognosis. This generates a vicious circle that is difficult to break; in any attempts to do so, advanced social policies should play a major role.

Also among the editorials is a comment by Schiele and Bassand on the article by Cequier et al. that analyzes the impact on mortality of different network systems in the treatment of ST-segment elevation acute myocardial infarction, based on discharges from the Spanish national health system between 2003 and 2012. The most important findings of the study were a reduction in risk-standardized mortality rates associated with the implementation of reperfusion networks, which in turn was associated with a 50% increase in the rate of primary percutaneous coronary intervention. Despite these positive findings, there is a need to minimize the differences in reperfusion rates between the autonomous communities. Schiele and Bassand make the pertinent observation that, because the data were drawn from an administrative database, the results should be interpreted with caution. The direction of these results, however, largely agrees with the continuous increase in the reperfusion rate and the parallel decrease in mortality. As mentioned by the authors, that is no obstacle for the implementation of a prospective national registry of myocardial infarction that would allow not only confirmation of the findings but also a more in-depth analysis of the quality of care, a cornerstone of continuous improvement. In this regard, this issue also contains a study by Carol Ruiz et al., based on the *Codi Infart* registry of Catalonia, which analyses the potential predictors of delay to reperfusion in STEMI patients receiving primary angioplasty, as well as the impact of the place of first medical

contact. A delay of > 120 minutes between the first medical contact and artery opening was associated with several factors, some of which warrant more in-depth analysis, such as first medical contact in hospitals without a catheterization laboratory (in more than half the cases), advanced age, previous coronary surgery, first medical contact at nighttime, nondiagnostic electrocardiogram, and Killip class \geq III. The final editorial in this issue is an interesting comment by Knops and Brouwer on the use of the subcutaneous implantable defibrillator in primary prevention vs the conventional defibrillator. The main potential advantage of the former—the absence of risk of cardiac perforation and pneumothorax and minimization of other risks (eg, infection, venous obstruction)—must be weighed against the impossibility of obtaining pacemaker or antitachycardia therapy, with the much lower battery life and the current preference for implanting percutaneous devices with the patient under general anesthesia to measure the defibrillation threshold. There is a need for clinical trials comparing these 2 strategies for primary prevention.

In an interesting study performed in 142 patients undergoing primary angioplasty with positive coronary aspiration, Blasco et al. conducted a histological examination of aspirated samples by using immunohistochemical techniques and found that the presence of plaque in aspirate was associated (adjusted by TIMI flow, ejection fraction, culprit coronary artery, and smoking) with longer event-free survival after a follow-up of more than 2 years. Although the sample is small and the added prognostic value of this factor on clinical factors is doubtful, the finding is of interest because it indirectly approaches the complex mechanism triggering infarction. Whether the association described is involved in the causal chain of this event will have to be elucidated by future studies designed specifically with this aim. This issue includes another article on the topic of ischemic heart disease by Hernández-Pérez et al., analyzing the prognostic impact of coronary collateral circulation in patients with ST-segment elevation myocardial infarction. Coronary collateral circulation was evaluated before reperfusion with primary angioplasty. This retrospective observational study was conducted in a cohort of 947 patients. Propensity score matching was used to establish 2 groups: one group of 175 patients with Rentrop 0-1 matched with another group of 175 patients with Rentrop 2-3. Although the presence of good collateral circulation before reperfusion was not statistically significantly associated with better survival, the interpretation of the results of this study is not conclusive. That is, a consistently—but nonsignificantly—lower event rate was observed in the Rentrop 2-3 group. Because the sample size was moderate, there is a possibility that, if the study had greater statistical power, a clear benefit might have been observed, although small in magnitude. The last of the original articles in this issue is a study by Husser et al. analyzing the additional value of CA125 levels to that of the EuroSCORE in predicting midterm mortality in patients undergoing TAVI. This analysis can be considered the second part of a study previously published by the same authors in *JACC Cardiovascular Interventions* (<http://dx.doi.org/10.1016/j.jcin.2013.02.006>), describing the ability of this marker to predict adverse events in this population. The article in the present issue goes further and quantifies the additional value of CA125 in terms of its predictive capability (net classification index and integrated discrimination

improvement), beyond that obtained by the EuroSCORE, and also presents a new classification system combining both variables and showing that patients with elevated EuroSCORE and positive CA125 have a poor midterm prognosis.

Last, this issue also includes the Editor's page, an annual section in which we discuss the overall position of the journal, its activity in the previous year and our plans for the future.

As always, don't forget to take a look at our excellent images and read the Scientific Letters and Letters to the Editor, which will undoubtedly stimulate an enriching debate, or to participate in our monthly ECG Contest.

Ignacio Ferreira-González
Editor-in-chief