## Atrium

This month's commentary by Fernando A. Navarro, which opens the issue, delves into the difficulty of translating the English word "shock" to Spanish, mainly because Spanish is lacking an exact conceptual equivalent.

In the first of the editorials, Kolte and Elmariah discuss an original article by Sanchis et al. aiming to assess the safety and outcomes of MitraClip implantation in functional mitral regurgitation according to the degree of left ventricular dysfunction. The study assessed 58 patients undergoing this procedure. The mean follow-up was almost 20 months. Survival was better in patients with poor ventricular dysfunction (LVEF > 20% and LV enddiastolic dimension < 70 mm) than in those with more severe dysfunction, although functional class improved in most patients, even in those with the most severe dysfunction. Kolte and Elmariah review the findings of the study, as well as discrepancies with the MITRA-FR and COAPT trials. They also compare some of findings of the study by Sanchis et al. with those of MITRA-FR. As a criticism, they highlight that the present study had no control group, making it difficult to state with any certainty that the symptomatic improvement was due to MitraClip implantation. Irrespective of this consideration, the study demonstrates the feasibility of the procedure in an especially delicate population. Both the original article and the editorial are published as open-access articles and the former is accompanied by an Editor's pick video.

In the next editorial in this issue, Ruiz-Nodar discusses an original article by Jiménez Díaz et al. aiming to assess the impact of vascular access site on bleeding complications after percutaneous coronary interventions in patients at high bleeding risk at 30 days and 2 years. The study was a prespecified subanalysis of the LEADERS FREE trial, which evaluated the safety and efficacy of the Biolimus A9 drug-coated stent versus those of a bare-metal stent in 2432 patients at high bleeding risk. Transradial access, which was preferred by operators (59.8% of the total number of patients), was associated with a significant reduction in the adjusted rates of major bleeding events at 30 days and even at 2 years of follow-up. Ruiz-Nodar provides an in-depth review of the LEADERS FREE trial, whose results practically exclude the systematic use of bare-metal stents. In addition, the author admirably reviews the clinical and health care-related factors that could lead to a high bleeding risk and discusses the optimal approach to this situation.

In the next, Uribarri and San Román discuss an original article by Sánchez-Salado et al. aiming to assess the association between hospital characteristics in treating centers and mortality in cardiogenic shock secondary to ST-segment elevation myocardial infarction. The study analyzed 19 963 discharge episodes with a diagnosis of ST-segment elevated myocardial infarction-related cardiogenic shock selected from the Minimum Data Set of the Spanish National Health System (data 2003-2015). Briefly, this important study found that crude and risk-adjusted mortality rates progressively decreased between 2003 and 2015, that coronary revascularization—whether surgical or coronary artery bypass grafting—was independently associated with lower mortality and—more importantly—that the availability of an intensive cardiac care unit, managed by cardiology services, was associated with lower adjusted mortality rates. Uribarri and San Román highlight that the approach to the entire cardiological process should be conducted by the same service during admission, which enhances continuity of care and may avoid delays in examinations and their repetition, thus guaranteeing patient safety and health system efficiency. They also discuss the benefits of the shock code, with the possibility of more widespread use of portable ECMO for initial in situ circulatory support in these patients.

This issue also contains a free-standing, open-access editorial by Rodríguez et al., who discuss the recommendations on physical exercise during the lockdown. The article provides highly useful and pertinent information for all cardiovascular patients during this period.

Atrioventricular block in the presence of bradycardic drugs can be reversible and pacemaker implantation is controversial. In the next original article, Jordán-Martínez et al. analyze the need for pacemaker treatment in the mid-term after bradycardic drug discontinuation in a cohort of 127 patients attending the emergency department with high-grade atrioventricular block in the context of bradycardic drugs. Atrioventricular block resolved in 60 patients after discontinuation, although 40 of these patients had recurrence during the 24-month median follow-up; despite bradycardic drug discontinuation, 107 patients (84.3%) required pacemaker implantation. The factors associated with pacemaker need at 3 years were initial heart rate < 35 bpm, symptoms other than syncope, and wide QRS. Overall, this is a highly interesting study that tackles a little studied problem with health care relevance.

Patients with heart failure and reduced ejection fraction have prompted a large number of clinical studies and it has been shown that various therapies lower mortality in this context. However, there are few data on the effect of the use of the distinct therapies on causes of death in clinical practice. In the last original article in this issue, Fernández-Vázquez et al. studied 2351 outpatients with this condition (LVEF < 40%) from 2 multicenter prospective registries: MUSIC (n = 641, 2003-2004) and REDINSCOR I (n = 1710, 2007-2011). Patients in the later registry more frequently received beta-blockers, mineralocorticoid antagonists, implantable cardioverter-defibrillators, and resynchronization therapy. This was associated with less frequent sudden cardiac death (6.8% vs 11.4%). Moreover, after propensity score matching, the later population showed a lower risk of total mortality and sudden cardiac death, and a trend toward lower mortality due to end-stage heart failure, with no differences in other causes of death, regardless of functional class.

Last, this issue includes a special article in which Bonanad et al. discuss the effects of the COVID-19 pandemic on cardiovascular disease in the most vulnerable populations, such as the elderly. This undoubtedly represents a challenge from the cardiovascular point of view, in terms of treatment and prevention, both during and after the pandemic.

As always, don't forget to take a look at the excellent images in this issue or read the letters. We also encourage you to take part in our monthly ECG Contest.

> Ignacio Ferreira-González Editor-in-chief