Atrium

Prompted by a recent ''Letter to the Editor'' drawing our attention to the excessive and possibly incorrect use of *severo* in Spanish, Fernando A. Navarro opens this issue with the first of 3 short articles on *severo* as a literal translation of the English ''severe'' to refer to the intensity or seriousness of a disease or condition.

The concept of the ''survival chain'' was introduced in the 1980s to describe a group of actions to improve the chances of survival after a cardiac arrest, including rapid access to medical attention, cardiopulmonary resuscitation, defibrillation, and circulatory support. Over the years, this concept has been refined, with recognition of the need to implement preventive measures in order to prevent the higher number of cardiac arrests in the at-risk population, as well as the need to begin cardiac rehabilitation measures after achieving initial survival. This is the process known as the ''survival cycle'', which is admirably reviewed by González-Salvado et al. in the first of the editorials in this issue.

In the next editorial, Pulignani and Andreassi discuss the role of microRNA in congenital heart disease. These small RNA molecules, whose function lies in postranscriptional regulation, may be able to regulate–at least partially–the pathogenesis of multiple congenital heart diseases. Although the intimate mechanism is unknown in many cases and current knowledge is purely hypothetical, it seems that microRNA has strong potential as a diagnostic and prognostic tool in these diseases.

This month's editorial section also contains comments on the fourth universal definition of myocardial infarction and the clinical practice guidelines on myocardial revascularization. In these comments, the corresponding working groups of the Spanish Society of Cardiology highlight the salient points and novelties of these ESC documents, whose translations will be published in this issue. Both the translations of the guidelines and the comments are published in open-access format.

In the first of the original articles, Nunes Filho et al. report the results of a multicenter Brazilian study that included 794 patients and assessed the impact of acute kidney injury on short- and long-term outcomes after transcatheter aortic valve implantation (TAVI) using VARC-2 criteria. They found that acute kidney injury is a frequent complication after TAVI (18%), whose occurrence is associated with advanced age, diabetes mellitus, major or life-threatening bleeding, and valve malapposition. They also found that, although acute kidney injury was a determinant of poor short- and long-term outcomes, its impact on mortality was limited to the first year after TAVI.

Increased epicardial adipose tissue seems to be a new risk factor, or at least a factor associated with coronary heart disease. In the next original article, Marí-Alexandre et al. attempt to shed light on this concept, focusing on the thickness of epicardial adipose tissue and its microRNA expression profile and the factors possibly influencing them. To do this, they performed a case-control study analyzing 155 autopsies from persons who died from sudden cardiac death due to coronary disease and 84 controls who died of sudden cardiac death due to other causes. Briefly, the authors found that epicardial adipose tissue expression in persons dying from sudden cardiac death due to coronary disease showed increased levels of miR-34a-3p and -34a-5p independently of age, epicardial adipose tissue thickness, various anthropometric measures,and the presence of underlying atherosclerotic plaques.

In the next original article, Na et al. analyze whether the vasoactive inotropic score (VIS) is an independent predictor of mortality in cardiogenic shock. The authors conducted a retrospective, observational study of 493 patients with cardiogenic shock admitted to the cardiac intensive care unit of a South Korean hospital. In-hospital mortality according to VIS quintiles ranged from 8.2% (lowest quintile) to 65.7% (highest quintile), and a close association was found between a high level of vasoactive inotropic support during the first 48 hours and in-hospital mortality. However, this association was not observed in patients who, despite having a high VIS score, were treated with extracorporeal membrane oxygenation.

Although cardiac resynchronization therapy is beneficial in selected heart failure patients, a not inconsiderable number do not respond to this treatment. In the next original article, Perge et al. study the association between various biomarkers (fractalkine, pentraxin-3, hepatocyte growth factor, carbohydrate antigen-125, matrix metalloproteinase-9) and outcome in terms of cardiovascular mortality and reverse remodeling in 136 patients with cardiac resynchronization therapy. Of the biomarkers analyzed, only hepatocyte growth factor was associated with poor outcome after cardiac resynchronization therapy independently of other parameters. According to the authors, this biomarker could be useful in improving patient selection for this therapy.

In the last original article in this issue, Bernal et al. assess the concordance of the Minimum Basic Data Set (MBDS) with the DIOCLES registry, which is essential to determine its usefulness in outcomes research in acute coronary syndrome in Spain. The good news is that the agreement observed was almost perfect ($\kappa = 0.863$), and the sensitivity and specificity of the MBDS were 85.10% and 98.31%, respectively, indicating that the MBDS could be useful for outcomes research in acute coronary syndrome in Spain.

In addition to the previously mentioned translations of the fourth universal definition of myocardial infarction and the ESC clinical practice guidelines on myocardial revascularization, this issue also includes a third open-access special article, namely, the recommendations of the geriatric cardiology section of the SEC for the assessment of frailty in elderly patients with heart disease. Such assessment is currently essential for the correct treatment of these patients and for the highest possible quality of care for older individuals, irrespective of specialty.

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

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