Atrium

This month's article by Fernando A. Navarro, which opens this issue, explains the wordplay giving rise to the curious English term for a type of ST-segment morphology in acute myocardial infarction: (tombstone ST elevation).

In the first of the editorials, Estruch and Sacanella discuss an original article by Díaz-Gutiérrez et al. This interesting study was performed in the SUN cohort and aimed to analyze the association between a healthy lifestyle score and the incidence of hard cardiovascular disease events. The SUN Project is a prospective cohort of Spanish university graduates that includes 19 336 participants, in whom the authors calculated a healthy lifestyle score (0-10 points) that included not smoking, physical activity ($>$ 20 MET-h/wk), adherence to the Mediterranean diet, low body mass index, moderate alcohol intake, low television exposure, no binge drinking, taking a short afternoon nap, spending $>$ 1 h/d with friends, and working $>$ 40 h/wk. After a median follow-up of 10.4 years, a higher healthy lifestyle score (7-10 points) was associated with a 78% relative reduction in the risk of having a cardiovascular event compared with the lowest score (0-3 points), and each habit was individually associated with a lower risk. The authors of the editorial take each of the components of the scale and compare them with the findings of other epidemiological studies. Of note, each component showed the expected association with cardiovascular risk, except the variable "working $>$ 40 h/wk", which had a protective effect in the study by Díaz-Gutiérrez et al. and a deleterious effect in other epidemiological cohorts. Both the original article and the editorial are open-access and the original article is accompanied by an Editor's pick video.

Type 2 diabetes mellitus is currently one of the most prevalent health problems worldwide. Its treatment has been revolutionized by the development of new molecules that, in addition to improving glycemic control, seem to have a highly positive effect on metabolic control, which could influence cardiovascular outcomes. In this issue, the editorial by Castro et al. delves into these concepts and refers to a supplement on the topic that could be of interest to clinical cardiologists.

In another editorial in this issue, Lekuona discusses a work by Zamora et al., aiming to estimate the number of patients who would be candidates to receive PCSK9 inhibitors (PCSK9i) according to distinct published criteria. To do this, data were obtained from the Information System for the Development of Research in Primary Care. The study included patients aged $\geq$ 18 years with at least one low-density lipoprotein cholesterol measurement taken between 2006 and 2014 (n = 2 500 907), and up to 3 criteria for therapeutic indication were analyzed. In an optimal lipid-lowering treatment scenario, the number of possible candidates to receive PCSK9i ranged from 0.1% (n = 41 570) to 1.7% (n = 634 440) of the participants analyzed, depending on the guideline considered.

The subgroup of patients with the greatest proportion of potential candidates comprised patients with familial hypercholesterolemia, and the subgroup with the highest absolute number consisted of patients in secondary cardiovascular prevention. In addition to reviewing the origin of these drugs and the evidence, the author of the editorial discusses the implications of their use for the health system and stresses the need to establish risk weighting systems that, within each patient subgroup, could identify those likely to obtain the greatest clinical benefit, bearing in mind scientific cost-effectiveness criteria as the cornerstone of sustainability.

Related to the above, this issue contains an original article by Orly de Labry Lima et al. estimating the cost-effectiveness ratio and budget impact of evolucumab (PCSK9i) treatment in patients in secondary prevention in the Spanish National Health System. According to their estimate, the mean cost of treating a patient with evolocumab for 26 months would be €11 134.78 vs €393.83 for standard treatment (statins + ezetimibe), with an incremental cost-effectiveness ratio above €600 000 per avoided cardiovascular event. At 10 years, the model showed a mean cost of €471 417.37 for standard treatment vs €13 948.45 for evolocumab. In summary, although this method is highly dependent on the assumptions and parameters of the model, according to the authors and based on the model, evolocumab would not currently be efficient in suitable candidates in the Spanish National Health System.

Arrhythmogenic right ventricular cardiomyopathy is an inherited cardiomyopathy defined by progressive fibrofatty replacement of right ventricular myocardium. This disease is a frequent cause of sudden cardiac death in young athletes. In another original article in this issue, Ruiz Salas et al. aimed to estimate the incidence of pathogenic or probably pathogenic desmosomal mutations in patients with this disease. To do this, the authors analyzed a retrospective cohort of 36 patients with a confirmed diagnosis of arrhythmogenic right ventricular cardiomyopathy. The article reports the incidence of pathogenic or likely pathogenic desmosomal mutations, with most mutations causing truncation, although these mutations were not associated with prognosis.

This issue also includes 3 special articles corresponding to the annual reports of the national registries on cardiac catheterization, ICD and pacemakers, which update the most significant data on the clinical activity in these specialties.

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

Ignacio Ferreira-González
Editor-in-Chief