Atrium

This month’s issue opens with an interesting commentary by Fernando A. Navarro on the Spanish term vasculatura. The commentary underlines the surprisingly large number of medical terms not included in the Spanish Royal Academy’s “Dictionary of the Spanish language” such as tiroides to refer to thyroid cartilage.

In the first of the editorials, Millenaar et al. discuss an original article by Rodríguez-Leor et al. presenting the results of a Spanish renal denervation registry for the treatment of resistant hypertension. The study included 125 patients. Six months after the intervention, systolic and diastolic blood pressure were significantly decreased and this reduction was maintained at 12 months. Moreover, the mean number of antihypertensive drugs decreased from 4.9 to 4.4 and the response rate to renal denervation was 80%. Millenaar et al. review the evidence on this intervention in clinical trials and summarize the findings of the main registries, without assessing the benefits of this treatment or the likelihood of its standardized use.

In the second of the editorials, Brion et al. discuss a study by Rincón et al. aiming to assess whether a genetic risk score improves prediction of recurrent events in young patients with acute myocardial infarction and identifies a more aggressive form of atherosclerosis. The authors studied a cohort of 81 nondiabetic patients younger than 55 years admitted for acute myocardial infarction and analyzed the association between a genetic risk score comprising 11 genetic variants and the appearance of a cardiovascular event (death, infarction, or admission for a cardiovascular cause). During a median follow-up of 4.1 years, there were 24 events and an association was found with the genetic risk score and recurrent events, with a slight improvement in the integrated discrimination improvement index of the multivariate model incorporating only clinical variables (increment in C-statistic, 0.086 and cNRI, 30%). In their commentary, Brion et al. clarify some concepts related to genetic risk models and the influence of the combination of genetic variants with small effects distributed throughout the genome. Thus, although the effect of each variant is too small to improve risk prediction, the combination of multiple variants can be useful. The authors of the editorial also warn of the need to validate the findings in larger studies and remind readers of the danger of extrapolation to other populations. Both the original article and the editorial are published as open-access articles and the former is accompanied by an Editor’s pick video.

There is a large amount of information indicating that right ventricular pacemaker pacing is associated with harmful hemodynamic effects that can lead to ventricular dyssynchrony and dysfunction. However, His bundle pacing represents a radical change. In the last of the editorials in this issue, Zanón et al. admirably discuss the rationale for this procedure, its development, and results to date. Moreover, the authors wonder whether it should become a standard practice due to its possible use as resynchronization therapy.

Although networks for the care of ST-segment elevation myocardial infarction obviously represent an improvement in the health care process, from an analytical point of view, few studies have quantified their real impact. In the next original article, Aldama et al. collected all events coded as ST-segment elevation myocardial infarction between 2001 and 2003 in the area covered by the Galician PROGLIAM network. The authors analyzed 5-year adjusted mortality in 2 groups: pre-PROGLIAM (2001-2005; n = 2878) and PROGLIAM (2006-2013; n = 3905). Implementation of PROGLIAM was associated with a reduction in 5-year adjusted mortality in general and in each of the regional areas. Moreover, pre-PROGLIAM differences in mortality among areas disappeared after the creation of the network. The authors should be congratulated both for their contribution to the implementation of PROGLIAM and for the present study, which demonstrates the benefits of good health care organization and intercenter collaboration.

The benefits of transcatheter mitral repair in some groups of patients with severe mitral regurgitation at high surgical risk have been well established in clinical trials. In the next original article, Pascual et al. report the results of a multicenter prospective registry with a 1-year follow-up that included 558 patients with severe mitral regurgitation. Most patients (n = 364) had functional etiology and, at 1-year, there were 95 events (all-cause mortality and admissions for heart failure). No significant differences were found according to the cause of mitral regurgitation. Independent predictors of a higher risk of events were baseline functional class, prior surgical revascularization, EuroSCORE II, diabetes, and left ventricular ejection fraction.

In the last of the original articles in this issue, Barge-Caballero et al. compared observed mortality with that predicted by the MAGGIC score in 1280 patients with heart failure treated in a specialized unit between 2011 and 2017. Observed mortality was significantly lower than predicted mortality both at 1 year (6.2% vs 10.9%) and at 3 years (16.7 vs 27.7%). This discrepancy was observed in all groups except in patients older than 70 years and in those with ejection fraction > 40%. The study has some limitations, since it did not apply other, possibly more validated scores, due to the lack of availability of biomarkers. However, it provides support for the promotion of advanced heart failure units accredited with the SEC-Excellence seal.

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