Atrium

The commentary by Fernando A. Navarro that opens this month’s issue delves into the lexical peculiarities of percentiles in English and Spanish in greater depth. This is the second installment of the series that started in the previous issue.

In the first of the editorials, published as an open-access article, Cequier and López-De-Sá discuss an original article by Pérez- Castellanos et al. aiming to develop and validate an early prognostic model for survivors of an out-of-hospital cardiac arrest. The multicenter study was performed in 3 intensive cardiac care units. The analyses were conducted in 153 survivors of an out-of-hospital cardiac arrest admitted to 2 centers, and the results were validated in 91 patients in the third center. The predictive model of “recovery without sequela” included 5 variables (shockable rhythm, age, lactate levels, time elapsed to return of spontaneous circulation, and diabetes mellitus), and provided an area under the curve of 0.90 (95%CI, 0.85–0.95). The area under the curve in the validation cohort was 0.82 (95%CI, 0.73–0.91). In addition to reviewing the state of the art on the topic and highlighting the measures with greatest impact in this scenario, Cequier and López-De-Sá highlight the strong interest of the study by Pérez- Castellanos et al. because one of the most important questions for health professionals and patients’ families is the early and reliable determination of the likelihood of a satisfactory neurological outcome.

In the next editorial, Evangelista and Teixidó-Tura discuss an original article by Moretín-Campillo et al., who performed an interesting multicenter study based on forensic autopsies carried out in 3 provinces. The study analyzed the clinical and pathological characteristics of sudden death due to thoracic aortic dissection in persons aged 1 to 35 years. There were 35 cases (80% male), with a mean age of 29 ± 5 years and an incidence of 0.09/100 000 inhabitants/y. The main autopsy findings were: cystic degeneration of the media (n = 27), dilatation of the ascending aorta (n = 21), cardiac hypertrophy (n = 20) and bicuspid aortic valve (n = 14). As mentioned by Evangelista and Teixidó-Tura, one of the most striking findings of this series is undoubtedly the high incidence of bicuspid aortic valve (14 cases, 43%); this finding should be interpreted with caution as 8 of these patients had other concurrent predisposing factors. Another notable finding was that half of the patients visited a physician because of their symptoms and were not diagnosed or referred to the emergency department, indicating the difficulty of diagnostic suspicion in this population.

We believe that now is a good moment to present in depth expert opinion on the past, present, and—above all—future of renal denervation in the treatment of hypertension. Consequently, for this issue of the journal invited García-Touchard and Sañudo to write an article on the topic, highlighting the tremendous importance of detailed knowledge of the anatomy and distribution of innervation in the renal sympathetic nervous system to successfully perform the technique.

A recurrent theme in the medical (and nonmedical) literature are the disparities in treatment and outcomes between women and men with acute myocardial infarction. This issue includes an original article by Araújo et al. aiming to identify sex-related differences in treatment and 30-day mortality in 771 patients by using the 20 quality indicators of the European Society of Cardiology. In brief, the percentage of women receiving optimal treatment was lower than that of men, which was associated with higher adjusted 30-day mortality. This finding has been observed in multiple contexts and should prompt reflection.

In the next original article, Brotons et al. develop a predictive function of lifetime cardiovascular risk, including both fatal and nonfatal cardiovascular events, in the working population in Spain. This retrospective cohort study included 762 054 participants, with a mean age of 35.48 years. In general, significant risk variables in the model were manual work, smoking, diabetes mellitus, antihypertensive treatment, systolic blood pressure, total cholesterol, high-density lipoprotein cholesterol, and lipid-lowering therapy. In men, the model also included alcohol consumption, body mass index, a history of early coronary disease, renal disease, and diastolic blood pressure. The new risk model showed adequate discrimination and calibration.

Pulmonary regurgitation is a common complication after surgery for congenital heart disease. In the last original article in this issue, Rodríguez-Serrano et al. describe lymphocyte expression of certain adrenergic receptors and kinases (reflecting the neurohumoral changes produced in heart failure) in patients with severe pulmonary regurgitation. The authors studied 35 patients with severe pulmonary regurgitation, 22 controls and 13 patients with heart failure and found that the gene expression profile of molecular markers of cardiac dysfunction in patients with severe pulmonary regurgitation was altered compared with that in controls and was similar to that of patients with advanced heart failure.

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