

Atrium

In this issue, Fernando A. Navarro's "Journey into the heart of words" continues the COVID-19 topic reviewing its influence on medical language.

In the first of the editorials, de Torres-Alba discusses an original article by Oliver Ruiz et al. aiming to analyze the health care structure and clinical characteristics of adult congenital heart disease in Spain. The authors performed a survey of the structure and activity of 31 Spanish hospitals. In general, the structure and activity of the Spanish centers fulfilled international requirements and were similar to those of other developed countries. Congenital heart diseases under specialized care consisted mostly of moderately and highly complex lesions, even in level 2 centers. De Torres-Alba highlights the growing frequency of these diseases, as well as their distinguishing features, which often fall between pediatric and adult cardiology, requiring that these patients be treated in experienced centers with adequately trained staff. Moreover, the author of the editorial places the situation in its historical context, with the various health systems—including the Spanish system—adapting to the management of these patients in the last few decades. This issue includes a freestanding editorial in which Gallego et al. discuss the potential risks of COVID-19 involvement in an especially vulnerable population, such as patients with congenital heart diseases. The authors also present an initiative involving several European centers to systematically collect data from patients with these diseases who develop COVID-19.

In the next editorial, López-Jaramillo et al. provide an in-depth discussion of the results of various epidemiological studies approaching several aspects related to the distribution of causes of death and risk factors for mortality in distinct countries according to their income level. Possibly the most important of these studies is PURE (Prospective Urban Rural Epidemiology), a population-based prospective cohort study including persons aged from 35 to 70 years from 21 countries and 5 continents. Its main finding was that, while cancer has replaced cardiovascular disease as the main cause of death in higher-income countries, cardiovascular disease continues to be the main cause of morbidity and mortality in middle- and low-income countries. Therefore, the authors of the editorial underscore the need to implement public health programs adapted to the social and economic realities of each country. Moreover, the availability of drugs with proven benefit in cardiovascular prevention, as well as access and adherence to them, should be guaranteed in low-income countries.

In the last editorial in this issue, Anguita discusses the potential limitations of evidence-based medicine, especially in relation to some diseases whose treatment is often based on expert consensus due to the lack of controlled studies. In this regard, the author refers to the recent publication in *Revista Española de Cardiología Suplementos* of the document "Expert consensus on heart failure with reduced ejection fraction: beyond the guidelines", which attempts to provide solutions to unresolved areas in this field.

The next original article in the issue covers the field of hemodynamics. The study by Lee et al. aimed to evaluate the association between quantitative plaque characteristics assessed by intravascular ultrasound (IVUS) or optical coherence tomography (OCT) and the severity of physiologic stenosis. In all, 365 stenoses were evaluated from 330 patients. In brief, resting physiological indices had an identical relationship with IVUS- or OCT-defined quantitative plaque characteristics. Fractional flow

reserve showed a stronger correlation with IVUS and OCT parameters than resting physiological indices. However, the diagnostic accuracy and discrimination ability of anatomic parameters were modest in predicting functional significance defined by resting and hyperemic invasive physiological indices.

Severe symptomatic aortic stenosis has a gloomy prognosis. However, the natural history of the disease can be altered by valve replacement. In the next original article, Pascual et al. assess whether the probability of survival in older patients undergoing this treatment returns to a value similar to that in the general population. The authors retrospectively analyzed the survival curves of 526 patients older than 75 years who underwent transcatheter aortic valve implantation in a single center and compared their survival with that in the general population of the same age, sex, and geographic region by using data from the Spanish National Institute of Statistics. They found that survival in older patients undergoing this technique was influenced by postoperative mortality. If patients survived this period, their probability of survival returned to a value similar to that of the general population of the same age, sex, and geographical area.

The prospective multicenter SAFEHEART registry was designed to analyze the situation of familial heterozygous hypercholesterolemia and improve knowledge of this disease in Spain. In the next original article, Pérez de Isla et al. present an analysis of the SAFEHEART study aiming to determine the incidence rate of cardiovascular events, the estimated risk of developing an event and its modification, the use of lipid-lowering therapy, and the achievement of low-density lipoprotein cholesterol targets. The authors analyzed 2648 patients. The overall incidence rate of cardiovascular events was 1.3 events/100 patient-year. The 10-year estimated risk of developing a cardiovascular event decreased during follow-up. A total of 20.6% of patients in primary prevention and 22.2% of those in secondary prevention achieved low-density lipoprotein cholesterol values < 100 and < 70 mg/dL, respectively. These data are undoubtedly encouraging in a population for which, until recently, there have been very few available treatments.

The concentration of circulating insulin-like growth factor binding protein 2 (IGFBP2) is increased in chronic kidney disease and is associated with a higher risk of mortality in dilated cardiomyopathy. In the last original article in this issue, Ravassa et al. analyze whether, in patients with distinct causes of heart failure, IGFBP2 is associated with chronic kidney disease and whether chronic kidney disease modifies the prognostic value of this protein. To do this, the authors studied 686 patients with heart failure under follow-up for 3.5 years. Briefly, they found that serum IGFBP2 is associated with impaired renal function in patients with heart failure and with a higher risk of cardiovascular mortality, especially in patients with chronic kidney disease and reduced glomerular filtration rate.

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