Atrium

In this issue, Fernando A. Navarro discusses abbreviations in medical jargon and provides a list of Anglo-Saxon apocopations (eg, art = artery) that will undoubtedly interest readers.

The first editorial, by Sieira and Brugada, considers an original article by Awamleh García et al. that, in a representative sample of the Spanish population aged 40 years or older from the OFRECE study, analyzes the prevalence of electrocardiographic patterns indicative of Brugada syndrome or QT interval abnormalities. Of a total of 8343 analyzed individuals, 12 Brugada patterns were detected, as well as a 0.18%-1.00% prevalence of long QT-related syndromes. Additionally, the prevalence of a borderline QT interval was 8.3%. As noted by Sieira and Brugada, the study is important because it is the first to analyze markers of sudden cardiac death in Spain and because it focuses on an age range (≥ 40 years) that is often overlooked in these types of studies, which are usually performed in younger persons. The authors of the editorial also remind us that a type 2 Brugada pattern is not diagnostic for Brugada syndrome. Both the original article and the commentary are open access.

The next editorial, authored by Rigamonti et al., discusses an original article by Bueno et al. that explores in greater depth why patients with NSTEACS are not revascularized in clinical practice, that is, why they are medically treated only. The authors analyzed a prospective cohort of 5591 patients with NSTEACS recruited from 555 hospitals in 20 countries in Europe and Latin America in the context of the EPICOR study, which involved a 2-year follow-up. They found that medical treatment alone was performed in 41.2% of patients and that slightly more than half of these patients (51.4%) did not even undergo coronary angiography. Those patients who did not undergo coronary angiography or who did but were not revascularized despite the presence of significant coronary heart disease showed a higher adjusted mortality risk in survival analysis. The authors of the editorial highlight the fundamental result of the original article, namely, that the "non-revascularized" patient population actually constitutes quite a heterogeneous group and stress the large variability between geographic areas in terms of the use of an interventional strategy for NSTEACS, which, they remind us, is internationally accepted by guidelines. In addition, they underline one of the limitations of the study in failing to record the main reason why coronary angiography was not performed in these patients, which would have been interesting given that its omission has been associated with a worse prognosis in multiple cohorts. Additionally, care must always be taken when interpreting prognostic associations gleaned from observational studies because a treatment indication bias can distort such associations.

While the wealth and interindividual variability in microbial species in the human intestinal flora has been known for some time, more recent work has described the specific intestinal flora profiles associated with the production of certain metabolic precursors of inflammation and oxidative stress that ultimately lead to the development of endothelial dysfunction and renal and cardiovascular disease. And, as if part of a vicious circle, intestinal wall edema and stress in patients with heart failure and/or kidney disease help to disrupt the integrity of the intestinal barrier, increasing the risk of passage of toxic metabolites and bacterial DNA to the bloodstream. All of this intricate mechanism, which is becoming increasingly complex, constitutes a novel, provocative, and reproducible theory of the pathophysiology and pathogenesis of cardiovascular and renal disease. It is thus timely to include a fascinating editorial by 2 experts in the field. Readers will no doubt enjoy the editorial by Kitai and Tang, who masterfully summarize the latest developments.

Turning to original articles, Jiménez-Jáimez et al. study the diagnostic yield of a protocol involving various diagnostic tests in patients with sudden cardiac death. In 56 families with an index case of sudden cardiac death, the authors performed electrocardiography, cardiac imaging, cardiac stress tests, family studies, genetic studies, and, occasionally, pharmacological tests. The deceased were examined with necropsy and a molecular autopsy with next-generation sequencing, as well as with a family study. Using this protocol, a diagnosis was achieved in 80.4% of individuals, with a higher rate of channelopathy diagnosis in survivors. Despite the retrospective and nonconsecutive nature of the work, which meant that not all participants underwent the exhaustive protocol and that there may have been a selection bias due to the specific inclusion of individuals attending the reference center, the study reports data of undoubted interest and novelty for Spain.

In another study, Lorenzo-Pinto et al. investigate the economic impact and health results of a package of measures aimed at reducing bleeding rates by optimizing the use of antithrombotic treatment in patients with acute coronary syndrome. The authors analyzed costs and bleeding and admission rates in 300 patients before the intervention and 377 after it. The measures evaluated were effective. All were common sense approaches, such as use of drugs with a safety profile adapted to patients' bleeding risk, monitoring of overdoses, and reductions in combinations of special bleeding risk. Specifically, there was a significant reduction in the bleeding rate (preintervention vs postintervention, 31.6% vs 22.3%) and an estimated annual cost avoided of 95 113.60 euros.

Under the heading "Valvulopathy", Echegaray et al. study the molecular phenotype of myocardial collagen in 40 patients with severe aortic stenosis, preserved ejection fraction, and heart failure symptoms. Using 2 transmural biopsies from the free wall of the left ventricle, they evaluated collagen volume fraction and stiffness, finding that diastolic dysfunction in these patients is associated with increased collagen deposition. This collagen was predominantly type I and had high stiffness. In the final original article of this issue, Massó-van Roessel et al., using a nested case-control study of the REGICOR (*Registre Gironí del Cor*) study cohort, attempt to detaermine the association of P wave duration and advanced interatrial block with the development of atrial fibrillation after a mean of follow-up of slightly more than 7 years. A P wave duration ≥ 110 ms increased atrial fibrillation risk, unlike advanced interatrial block.

As our readers will no doubt know, heart failure with preserved ejection fraction is a considerable problem due to the failure of clinical trials evaluating specific treatments for this condition. There is thus growing interest in more in-depth studies of diastolic dysfunction, particularly the latest causal mechanisms of this poorly understood alteration, which appears to be intimately related to myocardial fibrosis. Accordingly, we consider it opportune to include a review by Rommel et al. that provides an overview of the potential of myocardial characterization with T1 mapping through cardiovascular magnetic

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resonance in this condition, underlines its diagnostic and prognostic implications, and discusses future directions. Finally, also as a special review, Campelo-Parada et al. provide an update on current and future percutaneous treatments for tricuspid regurgitation. In addition, the authors include a detailed description of the anatomy of this complex valve, which will undoubtedly be useful for readers.

As always, don't forget to consult the excellent images in this issue and read the letters, which will undoubtedly stimulate an enriching debate, or participate in our monthly ECG contest.

Ignacio Ferreira-González
Editor-in-Chief