Atrium

Percentiles are defined as each of the equal groups into which a population can be divided. In this month’s “Into the heart of terminology”, Fernando A. Navarro discusses the lexical peculiarities of this term in English and Spanish.

In the first editorial in this issue, Asmarats and Rodés-Cabau discuss a study by López-Minguez et al., aiming to determine the incidence of stroke and bleeding events in patients with nonvalvular atrial fibrillation and left atrial appendage closure with long-term follow-up. This prospective cohort included 598 patients with a contraindication to oral anticoagulants. The success rate of left atrial appendage closure was 95.8%. Rates of mortality, ischemic stroke, intracranial hemorrhage, and severe bleeding were 7.0, 1.6, 0.8, and 3.9/100 patients-year, respectively. Both the ischemic stroke and severe bleeding rates were lower than expected according to CHA²DS²-VASc and HAS-BLED. Asmarats and Rodés-Cabau highlight the major strength of the study, which is its prospective nature and the mean 4-year follow-up of more than 25% of the series, conferring the study with undoubted value. They also mention the weaknesses of the registry regarding the absence of certain data, such as antithrombotic treatment during follow-up. However, they stress the importance of long-term information to establish the safety of new devices, as is the case of the study by López-Minguez et al.

The Canary Islands has the highest mortality from diabetes in Spain. In the next editorial Cordero and Bertomeu Martínez discuss an original article by Mate Redondo et al., aiming to compare in-hospital mortality due to acute myocardial infarction in this autonomous community with that in the rest of Spain and the population fraction attributable to diabetes. The authors performed a cross-sectional study of all hospital admissions for acute myocardial infarction in Spain from 2007 to 2014, registered in the Minimum Basic Data Set. Briefly, of a total of 415 798 acute myocardial infarctions identified, 16 317 occurred in Canary Island patients. These patients had a higher prevalence of smoking and higher mortality from acute myocardial infarction both among those with diabetes (8.7%) and those without (7.6%). Canary Island patients died a mean of 4 years earlier than patients in the rest of Spain. In the adjusted analysis, the Canary Islands had the highest risk of mortality vs the rest of Spain (odds ratio [OR], 1.25; 95% confidence interval [95%], 1.17-1.33). The authors highlight the distinct lipid profile of Canary Island patients and, as potential causes of the higher and earlier mortality, cite the greater prevalence of smoking, diabetes, and cocaine use. Consequently, Cordero and Bertomeu Martínez stress the need for strategies targeting health authorities that, in the case of the Canary Islands, should center on these risk factors. They also stress that, unfortunately, it is difficult to obtain data from the Minimum Basic Data Set that would help to identify the possible barriers to health care that could worsen outcomes and potentially be removed. Two obvious actions that should be undertaken by health authorities in the Canary Islands are improvement of primary cardiovascular disease prevention through strategies to encourage smoking cessation and prevention of diabetes mellitus and improvement of in-hospital care of acute myocardial infarction.

The last editorial in this issue, by Sanchis et al., “High-sensitivity cardiac troponin for the evaluation of patients with suspected ACS: a true or a false friend?” discusses the contributions and limitations of high-sensitivity troponin to the assessments of patients with suspected acute coronary syndrome. The editorial is particularly timely given the recent publication of a consensus document sponsored by 4 Spanish scientific societies on the use and interpretation of this substance in emergency departments.

Secondary branches are less well developed that the main epicardial arteries and there is longstanding debate on whether they should undergo percutaneous revascularization or conservative treatment. An original article by Cano-García et al. compares outcomes (cardiovascular death, nonfatal acute myocardial infarction, and need for revascularization) between a strategy of revascularization of severe lesions in secondary branches (≥2 mm) and conservative treatment. This prospective cohort study analyzed 679 lesions in 662 patients. After a mean follow-up of 22 months, there was a reduction in events in the entire series and no significant differences were identified between the 2 strategies.

Palpitations are undoubtedly one of the symptoms prompting a large number of emergency department visits and their diagnosis is a challenge. In the next original article, Francisco-Pascual et al. assess the diagnostic yield and cost-effectiveness of a diagnostic protocol based on the systematic use of latest-generation external loop recorders vs a conventional strategy in patients with palpitations. The study analyzed the percentage of definitive diagnoses and the cost per diagnosis with the external loop recorder, which was used in 91 patients, compared with a historical cohort of 58 patients. The diagnostic yield was higher with the external loop recorder strategy (86.8% vs 20.7%) and the cost was much lower (€375.65 vs €5,184.75), since this strategy resulted in a cost reduction of €11.30 for each percentage point of increase in diagnostic yield.

Danon disease, caused by mutations in the LAMP2 gene, gives rise to hypertrophic cardiomyopathy with pre-excitation and extreme hypertrophy, intellectual disability, and myopathy. In the last original article in this issue, López-Sainz et al. report a series of 27 patients from 10 hospitals, providing a detailed description of the phenotypic alterations and prognosis of Danon disease after a median follow-up of 4 years, during which 67% of male patients and 43% of female patients died or received a transplant. The number of individuals studied is small; however, given that the disease is rare, this study analyzes one of the largest cohorts described to date.

Lately, there has been growing interest in the relationship between cancer and cardiovascular disease. Because of increased life expectancy in both diseases, their coexistence in the same patient is becoming more common, making adverse drug reactions more likely and increasing risk. This is especially important in atherosclerosis, which seems to share a common pathophysiological substrate with cancer. Consequently, we believe it timely to include a review of
the topic in this issue, in which Raposeiras Roubín and Cordero provide an overview of the relationship between the various cancer treatments and the risk of coronary and cerebrovascular disease, as well as the current scientific evidence on the possible relationship between antiplatelet therapy and the risk of cancer.

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