

Atrium

This issue opens with an article by Fernando A. Navarro, who delves into the differences between true eponyms and common nouns in some English terms. Such differences can sometimes be difficult to delineate, as shown in the first part of this *Into the heart of terminology series*.

In the first of the editorials, Lupón and Bayés-Genís discuss an original article by Martínez Santos et al. aiming to identify the prognostic factors associated with hospital admissions for heart failure and to establish an association between hospital characteristics and outcomes. To do this, Martínez Santos et al. performed a retrospective study of discharges with heart failure as the main diagnosis throughout Spain in 2012, extracted from the Minimum Data Set. Among the 77 652 cases analyzed, in-hospital mortality during the index episode was 9.2%, increasing to 14.5% at 1 year of follow-up. Risk-standardized mortality was lower among hospitals with a high volume of heart failure discharges, although these centers had a higher 1-year readmission rate. The availability of a cardiology department was associated with better outcomes. Lupón and Bayés-Genís compare these mortality and readmission rates with those of other studies and highlight the main limitation of the work, namely the absence of data on out-of-hospital noncardiovascular mortality, which could significantly affect the results due to competing risks. Consequently, the authors of the editorial call for the creation of a Spanish heart failure registry that would be continuous, exhaustive, and of a similar quality to Nordic registries. Both the editorial and the original article are published as open access articles and the latter is accompanied by an Editor's pick video.

In the second editorial, Latib et al. weigh up the current options for the percutaneous treatment of severe tricuspid regurgitation. The editorial relates to 2 scientific letters on the same topic. Estévez-Loureiro et al. report the first case in Spain (and among the first cases in Europe) of the treatment of severe tricuspid regurgitation with a dedicated self-expandable valve, the GATE system. In the second letter, Íñiguez-Romo et al. describe the first case in Spain of percutaneous implantation of the Tricento valve in the tricuspid position. The procedure was a success. Latib et al. highlight important aspects of the technique, such as the large size and caliber of the introducers for vascular access, making the procedure far from risk-free, and the less than remote possibility of migration of some devices from the tricuspid position. They attribute this possibility to the fact that the use of this device is prioritized in very late-stage patients, with massive right ventricles, severe annular dilation, and highly distorted subvalvular anatomy, which undoubtedly make complications more likely. Consequently, they recommend the use of these procedures in patients at earlier stages.

Because of longer survival in patients with ischemic heart disease and population aging, there has been a rise in the prevalence of secondary mitral regurgitation. The approach to patients with this condition is complex, since morbidity and

mortality are high with medical treatment and the results of surgery are controversial. In the next editorial, Monteagudo Ruiz and Zamorano Gómez, delve into the advantages and disadvantages of the percutaneous treatment of secondary mitral regurgitation with MitraClip. The authors focus much of their discussion on the discrepant results of the MITRA-FR and COAPT trials and the causes of the differences and later provide their own perspective on the clinical implications.

Mortality is very high in patients older than 75 years with ST-segment myocardial infarction undergoing primary angioplasty in cardiogenic shock. The next original article, by de la Torre Hernández et al., reports a substudy of the ESTROFA registry, in 332 patients of the cohort aged > 75 years, with the aim of identifying the periprocedural predictors of mortality. Briefly, the variables associated with mortality were anterior location, ejection fraction < 40%, and time from symptom onset to angioplasty > 6 hours. Based on these variables, a prognostic score was designed with acceptable discrimination, but perhaps the most important point is that simple clinical variables can identify, even in older adults, those patients who are at higher risk.

The Spanish Society of Cardiology/Spanish Heart Foundation (SEC/FEC) annually awards grants for cardiovascular research projects. In this issue, Rodríguez-Padial et al. publish an original article aiming to analyze the trend in these awards and the resulting scientific output from 2007 to 2012. A total of 235 grants (39/y) were awarded with an allocation of €3 854 300 (€642 383 per year), resulting in 122 publications from 88 research projects funded by the SEC/FEC. Up to October 2017, these publications had received 2258 citations in subsequent studies in the Web of Science, with a mean of 18.5 and a median of 8 citations per study. Although these data seem highly positive, they need to be put in context and weighted against previous data.

In the last original article in this issue, Cano et al. report the results in Spain of the second European Society of Cardiology survey on cardiac resynchronization therapy (CRT-Survey II) and compare them with those of other participating countries. The implant success rate in Spain was 95.9%, with a lower implantation rate by center than that in other participating countries: 30 vs 55 implants/y. In Spanish centers, there was a lower proportion of patients aged ≥ 75 years, a higher proportion of patients in New York Heart Association class II, and a higher percentage of patients with electrocardiographic criteria of left bundle branch block. Last, the mean length of hospital stay was lower in Spanish centers, possibly as a result of differences in the type of population.

This issue also includes 3 special articles consisting of the annual reports of the national registries of catheter ablation, catheterization and coronary intervention, and implantable cardioverter-defibrillator, providing updates on the most significant data on clinical activity in these specialties.

The ability to simulate the processes of human intelligence through machines or computer systems is known as artificial intelligence. This issue includes a narrative review in which

Dorado-Díaz et al. discuss the concepts and the differences between the terms artificial intelligence, machine learning, deep learning, data science, and big data. The authors also describe the contribution of this technology to classical statistics, its current limitations, legal aspects, and early applications in the field of cardiology.

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