Atrium

In this month's "Into the heart of terminology" section, Fernando A. Navarro explains why the translation of the term "blood pressure" is not as simple as it might seem.

In the first of the editorials, Barrabés and Sambola discuss an original article by Regueiro et al. analyzing false positive ST-segment elevation (STEMI) myocardial infarction activations among the *Codi Infart* Network. The authors identified appropriate and inappropriate activations and, among the former, false positives were classified as: *a*) "angiographic" if no culprit coronary artery was identified, and *b*) "clinical" if the discharge diagnosis was other than STEMI. Among appropriate activations (87.8%), the percentage of angiographic false positives was 14.6% and that of clinical false positives was 11.6%. The variables associated with false positives were female sex, left bundle branch block, and previous myocardial infarction. When the clinical definition was used, false positive rates were higher in hospitals without percutaneous coronary intervention and in patients with complications during the first medical contact. Curiously, in-hospital and 30-day mortality rates were similar for false-positive and true-positive STEMI patients. The authors of the editorial comment on the importance of analysis and continual assessment of health care processes, especially in the care of STEMI, as performed in the study by Regueiro et al. A point to be remembered is that the data analyzed were from 2010 to 2011, shortly after the Network was launched, and it is therefore highly probable that current data, at least those concerning the inappropriate activation rate, would be different.

In the next editorial, Ozemek and Arena discuss a work by Palau et al. analyzing the association between peak oxygen consumption and the risk of recurrent admission in 74 patients with heart failure and preserved ejection fraction. The study is pertinent because of the high prevalence, poor prognosis, and lack of knowledge of this entity. In a mean follow-up of 276 days, 84 new hospital admissions were identified in 31 patients, and a 10% reduction in peak oxygen consumption was associated with a 32% increase in the risk of recurrent admission (IRR = 1.32; 95%CI, 1.03-1.68; P = .028). The authors of the editorial stress the importance of having tools to identify patients at higher risk of admission and highlight the use of a reduction in the percentage of peak oxygen consumption instead of other parameters obtained with cardiopulmonary exercise testing with measurement of peak oxygen uptake (VO_2), the most appropriate for this objective.

In the third editorial, Vlastra and Delewi discuss a study by Verdoia et al., a meta-analysis examining and comparing the effectiveness of different antithrombotic regimens in TAVI. Specifically, 9 studies were included, of which 5 compared dual antiplatelet therapy with aspirin monotherapy and 4 compared monoplatelet therapy. Of a total of 7991 patients, 72% were on dual antiplatelet therapy. After a 3-month follow-up, dual antiplatelet therapy was associated with lower mortality with no increase in major bleedings compared with monoantiplatelet therapy. The addition of oral anticoagulation to aspirin did not provide significant benefits. Although these results are thought-provoking, both the authors of the meta-analysis and those of the editorial point out that a single study, an American registry, represented 90% of the total weight of the studies comparing dual with single antiplatelet strategies and consequently the results should be interpreted with caution. Furthermore, the results of clinical trials on the topic, although small, contradict the results of the meta-analysis, since none has shown a higher risk of mortality or stroke with single vs dual antiplatelet therapy but they have shown a lower bleeding rate. The authors of the editorial conclude their article with a reminder that uncertainty is greater in research questions that have only been studied in observational studies or small-scale clinical trials and consequently data-sharing among researchers seems to be the way forward.

Cordero et al. report an interesting study analyzing the prevalence and incidence of malignant tumors in a cohort of 1819 patients admitted to their center for acute coronary syndrome over a 7-year period. The prevalence of cancer was 3.4% and, of the 1731 patients discharged, the incidence was 3.1% (53 cases); the most frequent locations were the colon, lung, bladder, and pancreas. Unsurprisingly, all-cause mortality after discharge was much higher among patients with *de novo* tumors (64.2%) or prevalent tumors (40.0%), increasing the risk of all-cause mortality 4-fold.

In the next original article, Baena-Díez et al. aimed to assess the validity of low-risk SCORE function without and with high-density lipoprotein cholesterol and SCORE function calibrated to the Spanish population, based on a pooled analysis with individual data from 12 population-based studies. Although the discrimination capacity was acceptable, in the 3 versions of the scale, predicted mortality was significantly higher than observed mortality. Assessment of the validity of the predictive tools used in clinical practice is essential. In the case of risk scales, specifically, their publication should be open-access and allow other authors the possibility of repeating the results, external validation and eventual updating (recalibration or introduction of new risk factors). This is the problem of the SCORE function (there is insufficient information in the literature), and consequently, although the methodology of this study is flawed, perhaps inevitably (due to the heterogeneity of studies, variable quality control, lack of validation of the online SCORE calculator for risk estimation, etc), we believe that any discussion on this topic is positive and of value.

The last original article in this issue, by Solana-Gracia et al., reports the results of the registry of percutaneous Melody pulmonary valve implantation in Spain. A total of 81 valves were implanted in 77 patients. The most common cardiac malformation was tetralogy of Fallot (n = 27) and most of the valves were implanted on conduits, especially bovine xenografts (n = 31). The incidence of intraprocedure and acute complications was 8% and 9%, respectively. After a follow-up of 2.4 years, infectious endocarditis was diagnosed in 4 patients (5.6%), of which 3 required surgical valve explant. The authors should be congratulated, as this is the first registry analyzing the results exclusively in the pediatric population, and should be encouraged to continue maintaining the registry and publishing its results.

As usual, don't forget to consult the excellent images in this issue or read the letters. The issue contains several letters concerning the latest advances of the Pediatric cardiology, Electrophysiology and arrhythmias, Heart failure and transplant sections. We also encourage you to participate in our monthly ECG Contest.

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