

Atrium



This month's issue of "Into the heart of terminology" delivers the second instalment on the names of clinical trials. Fernando A. Navarro provides us with a hilarious classification of these names, grouped into the following thematic areas: anatomical terms, toponyms, women's names, foodstuffs, and gastronomy.

In the first of the editorials in this issue, Castellano Vázquez et al. discuss an original article by Díez-Espino et al. analyzing the impact of the Life's Simple 7 strategy on the incidence of major cardiovascular events in Spanish adults at high risk in the PREDIMED cohort. As readers will know, this strategy, proposed by the American Heart Association (AHA), is based on 7 metrics of ideal cardiovascular health, which include body mass index, not smoking, healthy diet, physical activity, cholesterol, blood pressure, and blood glucose. Díez-Espino et al. analyzed these metrics in 7447 patients under follow-up for a median of 4.8 years and report a linear relationship between the number of unhealthy metrics and the rate of major cardiovascular events. Castellano Vázquez et al. mention the undoubted reduction in cardiovascular mortality in the last 4 decades, due to both improved risk factor control and treatment advances. However, they also point out that this progressive improvement has stalled for the first time in decades, possibly because of the rise in the prevalence of obesity and diabetes, as well as population aging. These phenomena justify the strategy of the AHA as a laudable attempt to invert current trends. Moreover, the authors of the editorial stress that the study is the first to demonstrate the population benefit of a larger number of healthy behaviors and factors in the Spanish population at high cardiovascular risk. Last, they raise the unavoidable question of whether we are really investing enough in health promotion compared with the investment in treatment. In this regard, the comprehensive health program directed by Dr. Valentín Fuster, one of the authors of the editorial, undoubtedly represents a paradigm shift in the overall approach of cardiovascular disease, which should serve as a model that can be exported to all societies and contexts.

In the next editorial, Masjuan et al. discuss an original article by Wintzer-Wehekind et al. aiming to determine the long-term safety and efficacy of closure of patent foramen ovale in patients older than 60 years. This cohort study was performed in 475 consecutive patients with cryptogenic embolism who underwent patent foramen ovale closure, of whom 90 were older than 60 years. Older patients had a higher prevalence of cardiovascular risk factors. Nevertheless, in these patients, foramen ovale closure was safe and was associated with a lower incidence of long-term ischemic events. This study is timely because the causal relationship between cryptogenic embolism and foramen ovale is not clear in patients with cardiovascular risk factors. As discussed by Masjuan et al., the need for a collaborative approach by neurologists and cardiologists is well established in patients younger than 60 years to establish the indication for foramen ovale closure in patients with strokes meeting the ESUS criteria. The authors of the editorial provide an admirable overview of the information available on foramen ovale closure in this population subgroup, and conclude that closure in these patients

should be reserved to moderate-to-large shunts in cryptogenic strokes that recur despite medical treatment and after exclusion of other possible causes.

Heart failure is one of the most important causes of mortality and hospitalization for cardiovascular disease. Consequently, in developed countries, health systems have implemented specific programs for this disease with the aim of improving prognosis and quality of life in affected patients. However, there are a multitude of possible interventions and health policies available for this aim, with the undoubted limitation of budgetary restrictions. This issue includes an editorial by McKenna and Montoro López, who critically review the various programs developed for the comprehensive treatment of heart failure. The authors of the editorial delve into both the factors determining the effectiveness of the various programs and the possibilities for assessing their effectiveness.

Patients are generally considered to be at high risk of cardiovascular disease if they have mild to moderately decreased estimated glomerular filtration rates. In another original article in this issue, Gil-Terrón et al. report a retrospective study analyzing 122 443 patients aged 60 to 84 years with available glomerular filtration rates and who underwent a median follow-up of 38.3 months. The study aimed to determine whether the risk of a glomerular filtration rate of 30 to 59 is equivalent to those of diabetes and a history of coronary artery disease. The authors found that, in persons aged 60 to 84 years with a glomerular filtration rate of 30 to 59 but without a history of coronary artery disease, the risk of admission for major cardiovascular events was 50% lower than that of individuals with established coronary heart disease but was similar to that of patients with diabetes.

Do outcomes after intervention for drug-eluting stent restenosis depend on whether the restenosed stent was polymer-free or polymer-coated? That is the question that Harada et al. aim to answer in another original article in this issue. The authors performed a randomized study including 326 patients with restenosis of drug-eluting stents. Of these, 220 were randomized to treatment with polymer-free stents and 106 to treatment with polymer-coated stents. Angiographic outcomes at 6 and 8 months and clinical outcomes at 2 years showed no substantial differences between the 2 groups. Although the undeniable strength of the study is its randomized design, when interpreting the results, one has to bear in mind that the demonstration of the absence of differences is directly related to the study's statistical power. Due to the small sample size, this is a limitation of the study, especially in terms of clinical events.

Neuron-specific enolase levels are a prognostic marker in patients with out-of-hospital cardiopulmonary arrest treated with mild therapeutic hypothermia. In the next original article, Rafecas et al. analyze the correlation between dynamic changes in neuron-specific enolase levels and major cardiovascular events and determine the measurement timing that best predicts neurological status. The authors conducted a multicenter cohort study that included 166 patients admitted after a cardiopulmonary arrest and treated with mild therapeutic hypothermia.

Increases in neuron-specific enolase levels were associated with higher mortality and worse neurological status at discharge. Moreover, a first determination performed between 18 and 24 hours after admission and a second at 69 and 77 hours postadmission showed excellent discrimination in predicting neurological recovery at discharge.

Although several studies have demonstrated the diagnostic and prognostic value of stress cardiac magnetic resonance in patients with ischemic heart disease, there is little evidence in the elderly. In the last original article in this issue, Esteban-Fernández et al. assess the usefulness of stress cardiac magnetic resonance in patients older than 70 years. The authors followed up a cohort of 333 patients (of whom 110 were older than 70 years) for a mean of 26 months. The severity of hypoperfusion was classified according to the number of affected segments, and the occurrence of events (death, acute coronary syndrome, or revascularization) during follow-up was analyzed. After adjustment for demographic variables and cardiovascular risk factors, the risk of events was higher in patients with moderate or severe ischemia. It remains to be determined how this additional information could affect the treatment and follow-up of these patients, as well as its potential

value compared with other classical techniques for detecting ischemia.

Myocardial interstitial fibrosis is a constant finding in structural heart diseases that progress to heart failure and is possibly a determining factor in prognosis. Consequently, the diagnosis and treatment of this entity is a real challenge that could change the paradigm of heart failure treatment through the principles of precision medicine. Consequently, we believe it timely to include a special article by Ravassa et al. in this issue, which reviews the proof-of-concept of the usefulness of phenotyping in patients with heart failure attributable to hypertensive heart disease based on its histomolecular alterations. This is undoubtedly a truly interesting perspective, which may change the approach to this disease in the future.

As always, don't forget to take a look at the images in this issue or read the letters. We also encourage you to take part in our monthly ECG Contest.

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