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LETTER TO EDITOR

Coronary artery disease, “stable” or chronic?

Enfermedad arterial coronaria ¿”estable” o crónica?

Doença arterial coronariana, “estável” ou crônica?

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Dear Editor:

It is necessary to make inquiries and annotations regarding cardiovascular medicine with respect to the different classifications of cardiovascular disease, given that it involves a topic of high global interest, by taking a deeper look with respect to its usual presentation.

Regarding the acute coronary event, there are several guidelines for the classification of coronary disease, which list a series of recommendations developed by different colleges and international societies with high global recognition such as the American Heart Association and the European Society of Cardiology.

On this occasion it is appropriate to address this issue and highlight the importance of recognizing "stable" coronary artery disease (CAD) as an entity to which more prominence should be attributed given the chronic repercussions on the prognosis involved in developing this condition as well as the follow-up with the aim of achieving a positive impact on the residual vascular risk of patients, by reducing fatal outcomes and the high comorbidity associated with the disease.

Fox, et al.[1] expose and diversify the current picture regarding coronary artery disease as factors related to: stable angina, history of cardiovascular events, multiple vascular bed disease, revascularizations, type 2 diabetes mellitus, chronic kidney disease, and heart failure, which are of vital importance to understand how this chronicity of risk factors leads to unfavorable outcomes for patients.

The PROSPECT clinical trial1 demonstrated that in patients with acute coronary syndrome (ACS) who underwent angiography and intravascular ultrasonography after percutaneous coronary intervention, it was observed that the typical atherosclerotic plaque modified its characteristics due to clinical interventions and even with the presence of healthy lifestyles, increased the presence of erosion-induced thrombi and generated changes in the presentation from acute ST-segment elevation myocardial infarction (STEMI) to non-ST-segment elevation myocardial infarction (NSTEMI). This leads us to recognize that CAD requires an intensified pharmacological and nonpharmacological approach in order to reduce major adverse cardiovascular event (MACE), the residual to which patients are exposed. Therefore, it is assumed that chronic cardiovascular risk is modifiable in the most vulnerable patients, that is, if a more objective and individualized characterization of this risk can be obtained, unfavorable outcomes can be reduced.[2]

With respect to CAD, another trial, IMPROVE-IT2, evaluated the use of ezetimibe after discharge for ACS. This included a population of 18144 patients in whom the risk of death or cardiovascular events was evaluated. It was found that such outcomes associated with death or cardiovascular events occurred in 35% of patients, even though secondary prevention strategies were used in 72% of patients. It is important to recognize that the risk of events is heterogeneous and also depends on the presence of comorbidities such as: diabetes, hypertension, chronic kidney disease, dyslipidemia, among others.[3]

On the other hand, it is also important to highlight that in patients who do not respond to medical treatment, the possibility of revascularization is established to improve symptoms in those with any coronary stenosis greater than 50%. In some bibliographies, such as that of Katritsis, et al.[4] , it was shown that this approach to stable CAD is fragmentary and that the recommendation is always to perform a multidisciplinary approach to make decisions on revascularization.

The REACH 3 registry clearly illustrates how the risk persists in chronic CAD, where MACE per year was 4.5% in the population included in this registry. Other national studies from Sweden showed that this risk of MACE persists through the months, even 12 months after the presentation of a first acute myocardial infarction.

The various antidiabetic agents are gaining prominence in the reduction of cardiovascular risk by demonstrating a favorable impact on the reduction of MACE, and although they were created as a response to the management of diabetes mellitus, their relationship with the reduction of MACE risk has been a finding. As was shown in the EMPA-REG OUTCOME where the use of empagliflozin vs. placebo was compared in patients with coronary artery disease, and a 10.5% reduction in cases of coronary artery disease was obtained vs. the use of placebo in 12.1%.[6]

Another study named LEADER, with the molecule liraglutide, reduced cardiovascular events by 13% compared to 14.9% for placebo and, finally, with the use of semaglutide in the SUSTAIN-6 trial, a 6.6% reduction in coronary events of interest was obtained compared to 8.9% generated by the use of placebo.[5,6,7]

Having said all of the above, stable coronary disease should be renamed to chronic given that it persists over time, given that the connotation of using the term stable has few elements to support it, when on the contrary, the existence of multiple comorbidities associated with previous coronary events and lifestyles could exacerbate this entity. Therefore, the importance of impacting CAD through multidisciplinary intervention of all the risk factors mentioned above is reinforced.[8]

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