Letter by Raposeiras-Roubín et al Regarding Article, “Mortality Associated With Atrial Fibrillation in Patients With Myocardial Infarction: A Systematic Review and Meta-Analysis”

To the Editor:

We have read in detail the meta-analysis of Jabre et al1 about the mortality associated with atrial fibrillation (AF) in patients with myocardial infarction. We believe it is an excellent work because of the interests in the subject and the delicacy of the analysis. However, we regret that the authors did not distinguish between the type of AF and the short- and long-term prognosis when making the analysis of mortality. Lau et al2 recently published the results of a multicenter registry of >3000 patients, which showed that new-onset AF was an independent predictor of hospital death, not follow-up death, unlike previous FA, which was an independent predictor of long-term mortality, but not in-hospital death. These results are consistent with those reported by Mehta et al3 with the results of the Global Registry of Acute Coronary Events. According to these authors, only new-onset AF is an independent predictor of in-hospital adverse events.

New-onset AF in the setting of acute coronary syndrome reflects the greater ischemic burden of coronary artery disease, resulting in an increase of oxidative stress level. Clinically, new-onset AF (as a consequence of myocardial infarction) translates a new hemodynamic status that generally implies a worse clinical course in the acute phase of coronary artery disease. In contrast, previous AF (which is not a consequence of the present ischemic event) does not imply an acute change in hemodynamic status, so in-hospital prognosis of acute coronary syndrome in patients with previous AF does not have to be worse. In contrast, long-term mortality is higher in patients with previous AF, as expected, because it means the existence of atrial remodeling and its effect over a heart with established ischemic heart disease.

Therefore, when we evaluate the prognosis of a patient with acute myocardial infarction and AF, we must take into account the temporary nature of the AF. If we focus on the prognosis of the acute in-hospital phase, we must consider that new-onset AF requires greater mortality, translating a greater degree of ischemia. If we value the long-term prognosis, it should be considered that chronic AF means a worse prognosis, translating the existence of a chronic structural and functional heart disease.

Disclosures

None.

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References

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