LETTER TO THE EDITOR

Bleeding risk assessment and comorbidities in elderly patients with acute coronary syndromes

Avaliação do risco hemorrágico e comorbilidades em doentes idosos com síndromes coronárias agudas

We have read with great interest the article by Faustino et al.[1] recently published in this journal. The incidence of acute coronary syndromes (ACS) in the elderly is increasing, and information on clinical management and risk stratification in these patients is scarce, since they are clearly under-represented in clinical trials. Faustino et al. reported that the CRUSADE bleeding risk score had a low ability (area under the receiver operating characteristic curve [AUC] 0.51) to predict major in-hospital bleeding in a series of 544 octogenarian patients with non-ST-elevation ACS, suggesting the need for new tools to predict major bleeding in this clinical scenario. In contrast, the authors found the GRACE score had good performance for predicting in-hospital mortality.

In our opinion, the most important limitation of this interesting work is the use of a different bleeding definition from that which formed the basis for the performance of the CRUSADE score. In the original paper by Subherwal et al.,[2] the CRUSADE bleeding criteria were fulfilled in almost 10% of patients, of whom 44% had a hematocrit drop >12% and 68% were transfused with a baseline hematocrit higher than 28%. Faustino et al. used the GUSTO bleeding criteria, which are significantly different from the CRUSADE criteria. On the other hand, only 16 patients in Faustino et al.'s series had major in-hospital bleeding, which may weaken their findings. However, we agree with the authors that these data may suggest the CRUSADE score has poor predictive ability in the elderly.

We recently[3] studied a population of 2036 consecutive ACS patients, assessing the predictive ability of the main available bleeding risk scores (CRUSADE, Mehran and ACTION) in patients aged 75 years or older (n=369, 18.1%)

compared to younger patients. We consistently observed that the ability of the three scores to predict in-hospital major bleeding (according to their own definitions) was lower in the elderly. We also assessed the ability of the GRACE score to predict in-hospital major bleeding as defined by the Bleeding Academic Research Consortium definition. Interestingly, the GRACE score showed a good predictive ability for major bleeding in the elderly (AUC 0.697), slightly lower than in younger patients (AUC 0.742). The GRACE score has also shown a good predictive ability for ischemic events in very elderly patients in other series.[4]

In our opinion, and as stated by Faustino et al., most of these findings may be due to the effect of age-related variables such as frailty, disability and comorbidities, which are rarely assessed in patients with ACS and may significantly hinder bleeding risk stratification in this clinical scenario. In addition, bleeding risk scores were based on populations with low representation of elderly patients, with mean ages ranging from 62 to 67 years.

However, we believe that the results from this paper are very interesting and highlight the importance of improving risk stratification in the elderly with ACS. This growing age subgroup has a high risk for both ischemic and bleeding complications. The routine assessment of age-related variables[5,6] will probably contribute to better risk stratification and clinical management of elderly patients with ACS in the future.

Conflicts of interest

The authors have no conflicts of interest to declare.

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Albert Ariza-Solé [a,*], Francesc Formiga [b], Eva Bernal [c], Alberto Garay [a]

[a] *Coronary Care Unit, Heart Diseases Institute, Bellvitge University Hospital, Barcelona, Spain*
[b] *Geriatrics Unit, Internal Medicine Department, Bellvitge University Hospital, Barcelona, Spain*
[c] *Cardiology Department, Germans Trias i Pujol University Hospital, Barcelona, Spain*

[*] Corresponding author.
E-mail address: aariza@bellvitgehospital.cat
(A. Ariza-Solé).