Letters to the Editor

DIOCLES: Some Caveats and New Questions

DIOCLES: algunos matices y nuevas preguntas

To the Editor,

We have carefully read the much-anticipated publication of the findings of the DIOCLES project.[1] The results show an encouraging general improvement in the mortality rates for acute coronary syndrome in Spain, although some points require clarification.

The increase in the number of patients who reach hospital via out-of-hospital emergency medical services is a positive finding and is reassuring for patients. We know that up to 8% of patients manage to reach hospital despite ventricular fibrillation when they are attended by an out-of-hospital emergency medical team[2] as the first medical contact. However, the mortality rate for ST-elevation myocardial infarction in DIOCLES (6.4%) should be combined with a mortality rate of at least 2% in the prehospital care phase, understood to be the period from when the patient calls the out-of-hospital emergency medical team until transfer to the destination hospital.[2]

It would also be interesting to know whether mortality, at least in the case of ST-elevation myocardial infarction, differs according to the level of care offered by the recipient hospital, as this has been shown to be a prognostic factor in these patients.[3,4] It seems reasonable to suppose that this is the case and that the availability of primary angioplasty would be a determining factor, although pharmacoinvasive strategies,[5,6] with early referral to a hospital with interventional capabilities, may place smaller hospitals at a similar level to referral hospitals in terms of mortality. Such a finding would be relevant and encouraging, and may enable the implementation of feasible strategies in areas where it is particularly difficult to maintain 24-hour primary angioplasty programs.[7] Such a finding would also require us to reflect on the worrying fact that a high percentage of thrombolysis in Spain is still applied in intensive care units. Early thrombolysis could be a good treatment.[8] When performed too late after the first medical contact, it is a serious problem for the health system. If, in addition, the first medical contact in these cases is an out-of-hospital emergency medical team, it is important that the DIOCLES findings clarify this point.

A third aspect, not well reflected in other registries, is the prognosis of patients with suspected acute coronary syndrome. Some studies suggest that these patients receive different care, probably of a lower quality, which along with the associated comorbidities may lead to the worse prognosis shown in DIOCLES.[9] The composition of this group is particularly noteworthy, with many more women and a higher mean age. This group requires special care and only data from clinical practice can bring this to light.

One last reflection is related to the possible adjustment and comparison of data between a prospective study with a meticulous methodology, such as DIOLCES, and results based on administrative databases, as is the case of the RECALCAR reports.[10] It would be helpful to know whether the differences, which are essentially inequalities, that the RECALCAR reports found among autonomous regions can also be detected in the DIOCLES results.

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