Letters to the Editor

Out-of-hospital Cardiac Arrest. The Need for Comprehensive Information

Parada cardíaca extrahospitalaria. La necesidad de una información integral

To the Editor,

We read with interest the excellent article by Loma-Osorio et al., which describes the main clinical and prognostic characteristics of patients recovering from an out-of-hospital cardiac arrest. Among many other data, this article reports some encouraging outcomes for these patients. Nevertheless, we would like to point out certain caveats, which were largely acknowledged by the authors themselves as limitations of their study. Data are available from out-of-hospital emergency services, although these are not focussed on discharge after admission to intensive care units. They cover a range of aspects, essentially related to the phase of prehospital care. The main problem, however, is their wide variability. In truth, the incidence of out-of-hospital cardiac arrest is unknown and therefore the survival rates on discharge of these patients may have numerous and substantial biases. Such biases are a complex phenomenon that affect all countries in our setting. Moreover, the most recent Spanish data vary in terms of methodology, making it impossible to draw firm conclusions. The results obtained cannot be reliably compared. As the authors point out, continuous prospective registries are required to provide an overview of what is actually happening in clinical practice. In Andalusia, the Empresa Pública de Emergencias Sanitarias keeps a registry of such characteristics. The results obtained at the first cut-off (January 2008 to December 2010) will provide some relevant data for the debate. In general, it is difficult to estimate exactly when cardiac arrest occurs. In our experience, almost one-third of out-of-hospital cardiac arrests occur with no bystanders present, and the bystanders who are present are not healthcare professionals and therefore their reliability is relative. Actions times of less than 8 min were achieved in a small percentage of patients. These times can only be achieved in areas with a high population density and extensive resources, and therefore extrapolation to the general population would be difficult. In effect, initial care administered by bystanders and defibrillation prior to the arrival of the out-of-hospital emergency service, 2 key elements in improving patient prognosis, are limited. Only 1 of every 5 patients had ventricular fibrillation as the initial arresting rhythm, and while 29% of patients arrived at hospital with a pulse, only 9% were discharged with satisfactory neurologic recovery. In-hospital mortality was close to 70%. These data are from an unselected population and are similar to those from registries of proven quality that have been running for more than 20 years and have provided valuable information on out-of-hospital cardiac arrest. Our results do not contradict those reported by Loma-Osorio et al. After all, they are drawn from different populations studied using distinct methodology. The differences do, however, highlight the need to continue working on collecting information. Only when the series analyzed have cross-sectional information from the moment of contact with the health system through to follow-up of the patient after discharge will reliable information become available on the realities, treatment, and outcomes of out-of-hospital cardiac arrest. For the survival chain to improve, an information chain is required. The effort required for this challenge should come from within a multidisciplinary framework.

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REFERENCES