

Sudden cardiac death: The best results depend on great efforts

Muerte súbita cardíaca: Los mejores resultados dependen de grandes esfuerzos

Francisco L. Moreno-Martínez¹✉, MD; and Osmani Rodríguez Camacho², MD

¹ Cardiac Catheterization and Cardiovascular Intervention Unit. Cardiocentro Ernesto Che Guevara. Santa Clara, Villa Clara, Cuba. Editor-in-Chief, CorSalud.

² Universidad de Ciencias Médicas Ernesto «Che» Guevara de la Serna. Pinar del Río, Cuba.

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The sudden cardiac death (SCD) represents a great challenge for any health system, since its estimated proportion is greater than 2 million a year, with a survival in the out-of-hospital setting in less than 5%¹. But it is not only because of its impact, but also the speed with which it is presented –often without previous symptoms– and the little time that is available to achieve, if possible, an effective resuscitation¹⁻³. Even medical emergency systems in developed countries often arrive too late^{4,5}.

The ventricular fibrillation, of any origin, is one of the main causes of potentially recoverable SCD⁶; that is why many public places have been equipped with automatic external defibrillators (AED) to bring as much as possible the possibility of defibrillation^{2,4}. Another strategy has been the training of several population sectors, not health staff, in the basic maneuvers of cardiopulmonary resuscitation⁷; but until now, it has only been achieved –without diminishing the importance of the fact– to reduce mortality

scarcely.

There is still a long way to go and, for the time, in addition to the health staff, the general population must also be involved; if not, it is impossible to achieve the desired results, because prevention strategies and control of risk factors are essential to reduce the incidence of this deadly disease^{1,2,8-11}.

At the levels of tertiary and secondary care, the knowledge and skills for diagnosis and treatment are guaranteed, but at the primary level it fails; not only for the responsibility of its workers, but also –in some places– due to lack of resources, to little or no possibility of transferring the patient immediately after stabilization, and to the lack of education for the population: health education¹².

The adequate stratification of patients and the identification of individuals at risk, in the relatives of someone who has suffered an SCD, have managed to diagnose and treat many possible causes, mainly genetic (electrical or morphological) and acquired. These include long and short QT syndromes, Brugada syndrome, hypertrophic and dilated cardiomyopathy, and ischemic and valvular heart disease, among others^{1,8-10,13}. But one of the most serious problems in confronting SCD is the high incidence of its main cause: acute coronary syndrome⁹⁻¹². More than 95% of these coronary events are of atheroscle-

✉ FL Moreno-Martínez
 Cardiocentro Ernesto Che Guevara
 Calle Cuba 610, e/ Barcelona y Capitán Velasco
 Santa Clara 50200. Villa Clara, Cuba.
 E-mail address: revista.corsalud@gmail.com

rotic origin and atherosclerosis is a disease that begins with life. In these cases, the identification of communities and individuals at risk does not guarantee the solution of the problem, because although the scientific-technological development has provided us with diagnostic equipment that allows the identification of vulnerable atherosclerotic plaques in a patient at risk, there is still no method that allows predicting which of those plaques or those vulnerable patients will develop the clinical manifestations of the disease.

All professionals working with this kind of patients and diseases are acquainted with the fact that primary prevention (primarily conducted in primary health care) is very important, focused mainly on changes in lifestyles and controlling cardiovascular risk factors^{1,3,9}, because the use of drugs, such as aspirin –for example– is reserved for secondary prevention, because in primary it has more risks than benefits (the incidence of hemorrhagic complications exceeds the prevention of thrombotic accidents)¹⁴.

However, the work of professional primary care is not limited to that, because the therapeutic advances, including the AED, come closer to the community every day⁴. It is important to emphasize that a high percentage of SCD takes place in the out-of-hospital environment, where most of patients die or are left with invalidating sequelae^{1,3,9}. Hence, the coordination with the emergency services is also of «vital» importance.

For all these reasons the international scientific community does not rest in the search for solutions and one of those examples was the successful development of the II National Symposium of Sudden Cardiovascular Death and the I Ibero-American Convention of Sudden Cardiovascular Death, held in Havana, between December 6th and 9th, 2016, where professionals from many countries of the world met.

This edition of CorSalud is a special issue, as the previous one, dedicated to the SCD, where several works presented at the scientific sessions of this important conclave are published. It is very difficult to detail what happened there, but it is worth publishing some of the essential work, adapted to the format of the journal.

In the last two numbers, CorSalud have presented scientific results of many researchers, updates on specific topics, comments, views, protocols, and guidelines and proposals for new courses.

There is no doubt that, in order to achieve the best results, everyone's effort is needed.

CONFLICTS OF INTERESTS

None declared

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