EDITORIAL

SAC 2007 Decompensated Heart Failure Admissions Registry. A Worrying Fact

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Over the past ten years, numerous admission registries for descompensated heart failure have been carried out. The reason for these registries was based mainly on the little knowledge on this disease, its changing manifestation, its heterogenous treatment, and, above all, "the reality". And the reality has been that heart failure has become a significant health problem in epidemiological terms (increasing incidence and prevalence), and in health costs (about 70% of these costs are generated during admission due to descompensated heart failure, which has increased about 170% Over the pastten years). (1)

As I mentioned above, descompensation –its most dramatic manifestation of heart failure– was certainly the least studied and therefore the most problematic regarding its diagnosis, risk stratification, and, above all, treatment. On many occasions, it is the "last ghetto of empiricism" in the evidence-based medicine era.

However, a review of the different registries carried out in our country, in Europe, and in the United States show us that Over the past ten years, the "reality" of admissions due to descompensated heart failure does not show significant variations. (1-4)

Let us go forward in how these registries are made. In general, they describe three moments or stages of this condition:

1. **Prehospital Stage.** At this stage, the data reviewed are the pre-treatment, the socio-economic situation of patients, and the causes of descompensation. And here we come across the first disappointment: in general, patients have been and still are undertreated. Examples of this are the percentages shown by the SAC 2007 admission registry: in a population with history of heart failure (about 66%), who were admitted due to a descompensation event over the past year (47%), the rates of use were 47% for ACE inhibitor, 49% for beta-blockers, and 23% for spironolactone. (5)
   These data contrast with the ones shown in other surveys, such as Office IC, in which the prescription rates were 92% for ACE inhibitor/AT II, 70% for beta-blockers, and 61.7% for spironolactone. This might explain one of the causes of descompensation: stop taking the medication at some point between medical consultation and admission. (6)
   In addition to these facts, if we consider that almost 80% of the patients had some type of health coverage –which would minimally guarantee drug provision– we face a truly serious reality: the little knowledge of the disease the patient and his/her family have, or the little information the doctor has previously been able to provide him/her.
   In addition to these data, this registry shows us that about 40% of the triggering causes are related to stopping the medication or the hygiene and dietary regime, what reinforces the above mentioned theory.
   In a few words, the **"time, dedication, and education"** the physician provides the patient seems to be a key point at this stage.
   Easy implementation measures based on education and support for the patient have been evaluated in different interventional studies, like the DIAL study, in which the sole intervention of a nurse pointing out warning signs, educating, and giving advice to the patient had an important impact on the readmission rate (7), with all its implications.
   This would seem to be the road. We do know which tools are to be improved at this stage; the real problem is that we do not know how to –or we cannot– implement them.
2. **Hospital Stage.** In my opinion, this stage is easier to understand, and less conflicting from the ethical point of view.
   The morbimortality of the past years has not been modified. The latest SAC registries, as said, do not show significant differences in spite of the advance of technology, the monitoring measures, the increased physiopathological knowledge, etc. (1-4)
   The truth is we have not moved forward regarding therapies. All the recently studied and developed drugs, if they have not increased mortality, at least have exceeded none of the existing ones; inotropes, vasodilators, and vasopressin inhibitors are some of the examples of continuous failure.
   An older population accumulates to this, resulting in the growing presence of associated cormobilities.
   What is the ideal therapy goal at this stage? Easy to define but terribly difficult to put into practice: relieve symptoms, reduce the descompensation

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risk, and basically, "do not harm". It seems that while protecting the patient from his disease, we should also protect him from ourselves. We know that diuretics are essential to treat congestion. However, different studies have shown that their inappropriate use can cause more deterioration of renal function (8, 9), and that inotropes may alleviate the patient (or the attending physician) quicker, but at the expense of causing more necrosis/myocyte apoptosis, or of inducing potentially life-threatening arrhythmias (10, 11), and the examples go on.

Admission marks milestones in our patients' disease progress; the ultimate goal is to relieve them, to get them out of their iminent threath to their health, and to take advantage of their hospitalization by educating them and their families about their condition.

3. **Post-hospital Stage.** Important new information about this SAC survey is the three-month follow-up that was carried out, which had not been considered in our country so far. And again, reality comes up against us and our patients: in 2007, post-hospital readmission and mortality were similar to the ones 5 or 10 years ago, according to international figures. (12)

If we go back to the previous admission, we will be able to recognize some of its causes.

A substudy of ADHERE registry (13) shows that about 30% of patients are discharged almost unrelieved of their congestion that motivated their hospitalization. This is related directly to subsequent morbimortality.

Causes? Many. But expertise, knowledge, and medical ability are probably the most focused causes as never before, although, in general, the period of time in hospital does not seem to be the limitation (with a median of seven days in the current registry). Probably, the decision of discharging is not the best one as regards quality.

Other essential milestones, such as deterioration of renal function and its undetection, and the use of drugs that interact negatively with patients' usual medication would increase the risk for readmission and early death.

Once again, education and adequate follow-up would result in improving patients' prognosis.

I think that in this stage, with a similar or higher associated mortality compared to intrahospital mortality, the patient has lower responsibility. We cannot deny that, in general, it is in this period when there is more adhesion to treatment and to hygiene and dietary measures.

We can give excuses, saying that patients who are readmitted or die are the most severe ones; the truth is we must carry the weight of our own responsibility.

This registry poses a situation difficult to accept for us, even with the limitations explained by the authors. The data obtained place us in our reality and pose us the question that in the "other country" (the one not revealed) with no social coverage, with more accesss to medications, or with "probably better health care", this situation is even more problematic.

Out of our awareness of these data, it is our responsibility to modify all those behaviors we can within our means, so that at least in five years we do not see those same problems reflected in a new registry.

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