Heart failure in noncardiac surgery patient. What’s up, doc?

Insuficiencia cardiaca en el paciente para cirugía no cardiológica ¿Qué hay de nuevo?

J. Álvarez Escudero*, S. Veiras del Rio

Department of Anesthesiology, University Hospital, Santiago de Compostela, A Coruña, Spain

Heart failure (HF) is an old and hackneyed problem of the patient to be operated. In 1977 Goldman advised against performing surgical procedures in patients with this pathology.1

Clearly, HF is a problem in medicine today. It affects 1–2% of the population and from 75 years of age its incidence may be as high as 10–20%. Patients with HF occupy 10% of hospital beds and represent 2% of total health care expenditure. Despite these figures, HF is often underestimated. It is the third leading cause of death from cardiovascular pathology behind ischemic heart disease and cerebrovascular disease and we should not forget that a number of patients who died from ischemic heart or cerebrovascular disease also suffered HF that somehow contributed to these deaths. The median survival of patients with advanced degrees of congestive heart failure (CHF) is lower than life span of many oncologic illnesses.2-4

Many authors have confirmed that CHF is an independent risk factor in surgical patients, specially when it courses with depressed left ventricle ejection fraction.5-9

This increased risk has not stopped growing influx of patients with CHF in our operating rooms, to be subjected to all kind of surgical procedures and this trend is expected to increase in the future.10 because, although cardiac mortality is decreasing, prevalence of ischemic heart disease, heart failure, atrial fibrillation and cardiovascular risk factors such as diabetes mellitus, are increasing which will undoubtedly increase the surgical demand in these patients.11-13

The literature that analyzes this problem is simply unapproachable and somehow regular publication of guidelines for good clinical practice are the ultimate expression of this concern.

Three of these guidelines should be highlighted: the classic Eagle guides with risk stratification founded on the type of surgery,14 the ACC/AHA 2007 guidelines15 and the last European ESC/ESA guidelines 2014.16

Given the existence of these reviews mentioned, we might think that our guide had no place in the current literature of reference. However we think otherwise, these guides mentioned above and many others are often impractical. They are exclusively focused on the preoperative assessment and optimization of “habitual” medication in these patients, but rarely they analyze anesthetic or surgical techniques and even less they care about postoperative questions and complications.

We have based – such as could not be otherwise – in these texts mentioned before and in many others, but we have tried to go a step further. We have tried to develop a ”perioperative” but not a preoperative document.

We believe that the anesthetic techniques may have its influence, the discussion of neuraxial anesthesia/general anesthesia must be considered and that in general
anesthesia the "preconditioning" described to be achieved with some drug should have enormous significance.

We believe that preoperative statins and beta-blockers are essential, but not sufficient and that both the monitor and the intra- and postoperative care are fundamental.

We are pessimists on the other side thinking that in these patients may have and indeed there is, myocardial damage so we think in this situation we should take into account the clinical effects of myocardial postconditioning.

This has mainly been our vocation. Going a step further. Cover the whole process. We do not claim only for identifying risk and preventing it from preoperative period but we intend to prevent and possibly fix it throughout the process.

We are concerned about situations in which the classical guides do not answer our doubts, clinical situations like non-delayable surgery for hip fracture in which all steps of preoperative evaluation should be performed in very limited time, because we know that the delay in some interventions may become more problematic than CHF itself.

Practical guides can be helpful for most of the physicians of our hospitals and must serve to analyze the whole process. That has been our perhaps overly ambitious purpose.

The Medicine is advancing very fast, and it is possible that during consumed weeks in correction and publication work new evidences have appeared respect to HF management. This is the magic of our profession: always caring for our patients with the best quality and always with a critical attitude, hoping that this evidence not included in this text, it can done be in subsequent reviews.

References

4. McMurray JJ, Adamopoulos S, Anker SD, Aurichio A, Boehr M, Dickstein K. The Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure 2012 of the European Society of Cardiology. ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012. Eur Heart J. 2012;33:1787–847.