

The rescue surgeon

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The treatment of cardiovascular diseases has recently experienced major changes, with the introduction of new technologies intentioned to bring benefits to patients. These new technologies include drugs, devices, procedures and surgical techniques, in order to reduce invasiveness and provide quality results comparable or superior to conventional treatment [1].

In this scenario of change, cardiovascular surgery has been actively participating, consolidating the insertion and performance of the cardiovascular surgeon in endovascular and minimally invasive procedures in areas where traditionally he is already present [2,3]. However, the introduction of these new technologies has the potential to substantially alter the daily surgical practice.

Interventions in heart and great vessels to implant devices are gradually being performed by professionals from other medical specialties, with insufficiency or even no training and technical training for resolution of complications that are inherently associated with these procedures. As a result, among all the daily activities of the cardiovascular surgeon, recently, another one has been added, the intervention to correct complications and failures of implant devices, featuring the surgeon rescue.

The introduction of these new techniques and devices, tens of them already in use and hundreds in development and testing, indicated to approach all types of heart defects, is accompanied by aggressive marketing in specialized and lay media, promoting the rapid dissemination of information on medical and lay public, which imposes and demands the medical professional.

Especially in the construction of initial experiments and the called "learning curve", the complications are more frequent and the cardiovascular surgeon has been called increasingly for solving urgent or emergency situations. Complications such as acute valvular insufficiency due to lesions of structures of the valve apparatus, aortic dissection, embolization of bad positioning of devices that can not be recovered; lacerations and ruptures of the heart chambers, great vessels and coronary arteries, thrombosis and occlusion of vessels, incomplete appositions and peri-

prosthetic leaks, are entering the list of the surgeon's activities, requiring use of new surgical techniques and resources that are not always part of the routine.

As a great number and models of device are hitting the market, each one with its potential to induce specific complications, it requires the surgeon to be constantly informed on the characteristics of each device being launched and in use, as well as the characteristics and potential complication.

One should add that the need for intervention by the surgical team usually occurs at inopportune times, night shifts or schedules that disrupt elective surgery, putting at risk the patients of elective daily programming, requiring rapid deployment of the team or markedly interfering with the routine of it, often already overwhelmed. In addition, it also changes the time of rest and requires more sacrifice and extraordinary commitment of cardiovascular surgeons.

Usually there is no early notice of the surgical team on the procedure performed and the patients were not properly informed on the procedure, with the risks, potential complications and need for urgent/emergency surgery not satisfactorily explained and detailed.

These new procedures, in many instances even with a lack of evidence on the benefits conferred to the patient, are only offered on the premise that in case of fail, conventional surgery may be performed and restore the initial prognosis.

One should add that in some situations the burden of failure of the procedure may be taken against the surgeon, especially in cases of fatal outcome, as it is performed in conditions of urgency or emergency and usually with the patient in critical condition and extreme risk. From the time of salvage surgery, the cardiovascular surgeon has to assume the entire burden for the care and the responsibilities from the surgical intervention, including the physical and psychological sequelae that may occur in long-term for the patient, in addition to dealing with the anguish and emotional aspects of the family.

Therefore, there is urgent need for regulation of these procedures, in which surgeons and patients must first be fully informed and patients explained. The informed written

consent of the patient should clarify all aspects related to the procedure and possible complications associated with, besides the possible need for salvage surgery.

Additionally, the remuneration of these special salvage procedures also need further discussion and should be covered with special fees, as they are not prescribed in the tariff in effect and the Brazilian Medical Association supports this measure by recommending increments for procedures performed during the night or the end of weeks. Therefore, the remuneration of such procedures should be regulated according to the severity they represent. The introduction of the prior multidisciplinary discussion on the case should be mandatory to allow the organization of salvage surgery in case of failure and therefore prevent adverse or even fatal outcomes.

It is imperative that the subject is discussed widely within the BSCVS and the authorities in order to such procedures follow routine on which there is participation of a full team capable of offering the patient maximum safety.

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