Conversion of Cardiac Surgery

I have read the opinion article by Borracci RA et al. (1) about the concern associated with the conversion of cardiovascular surgery. In the emergence of minimally invasive and endovascular procedures, cardiovascular surgery has been adapted to new technologies and to preferential patient inclusion in treatment decision. (2)

All over the world, the cardiothoracic specialty is in a period of change. A reduction in the number of residents entering the specialty, as well as specific training, have become a concern (3) Several reasons explain this situation: refusal to accept new technologies, probably because of the low evidence of studies proclaiming new gold standards, lack of randomized studies that go hand in hand with technological innovation, and rationality and objectivity to suggest a procedure. In some cases, there is reluctance on the part of trained surgeons to learn new procedures. On the other hand, training costs, the time it involves, or the financial future could be obstacles for new trainees. Although acceptance of change is variable, none of these circumstances would slow down technological progress or its incorporation into our daily practice.

For the moment, I consider recent studies on transcatheter aortic valve implantation in low risk patients a mere speculation. Let us remember that all published studies that endorse the transcatheter approach are referred under the context of a heart team in the process of evaluation, inclusion and performance of the procedure. So far, no data are available on how the same approach will be implemented in low-risk patients in the real world.

From the cardiac training viewpoint, the problem is how to solve the lack of standardization of the procedures and the acquisition and evaluation of new surgical skills. In general, training out of high-volume, tertiary care centers has been and continues to be unsystematic and unstructured. We have learned technical skills through various methods; however, in many cases standardized teaching has not been set up yet. The role of establishing or preestablishing quality standards, norms or guidelines is essential; it is the only way to have the necessary information to develop strategies that involve all actors, beyond individual capacities.

Current training regimens for both interventional cardiologists and cardiovascular surgeons have rough points of reflection and shortcomings. With a more comprehensive program, interventional cardiologists are afforded the opportunity to attend surgical cases and enrich their fundamental knowledge of the anatomy and spatial arrangement of the heart, while cardiac surgeons will have the chance to become familiar with percutaneous procedures and endovascular techniques. (4)

Nowadays, simulation and hands-on systems stand out as part of surgical training. The benefit of simulation methods in professional training has been demonstrated by the improved performance of professionals trained with these techniques, who are then more self-confident when performing procedures on patients, with the concomitant reduction in error rate. (5) Beyond the educational controversy, it is important that both cardiac surgeons and clinical and interventional cardiologists understand that integration and complementary skills are dynamics to achieve optimal patient care. Training of both groups of professionals should be regulated under the supervision of each specialty associations. For years, cardiac surgery has been based on strict studies and guidelines from our own medical/surgical societies. And I don't see the need for this to change. From the very beginning, leadership, commitment and supervision to treat our patients, as well as to train new generations of surgeons, should be the new goal to achieve on the path of "conversion of the specialty".

Conflicts of interest

None declared.

(See authors' conflicts of interest forms on the website/ Supplementary material)

Ethical approval

Not applicable.

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