Future Demand for Interventional Procedures in Structural Heart Disease. Is It Wise to Perform TAVI Only in Centers With On-site Cardiac Surgery? Response

Demanda futura de procedimientos intervencionistas en cardiopatía estructural. ¿Es sensato realizar TAVI solo en centros con cirugía cardiaca? Respuesta

To the Editor,

We appreciate the letter by Lozano et al. on the editorial published in *Revista Española de Cardiología*.[1] In this correspondence, Lozano and colleagues discuss 2 different aspects related to the future of transcatheter aortic valve implantation (TAVI).

First, they mention the expected growth in the number of implantations, an increase we also envision. The high prevalence of the disease, the excellent results obtained with TAVI vs surgery, the less invasive character of the technique, the homogeneity and consistency of the results obtained in numerous clinical trials, and the solid scientific evidence provided by these studies all point to an exponential growth in the number of TAVIs, with only economic conditions tempering the rate of growth.

Second, the authors address the controversial topic of TAVI performance in centers without on-site cardiac surgery. As they note, the health authorities in 2 Spanish autonomous communities have recently closed the TAVI programs in the centers of these communities lacking on-site cardiac surgery. This approach is based on a recommendation found in the management guidelines for valvular heart disease of the European Society of Cardiology of 2012 and adopted by the Spanish Society of Cardiology.[2] These guidelines consider the lack of cardiac surgery in a center to be an absolute contraindication for TAVI and recommend that TAVI only be performed in centers with on-site cardiac surgery, with a class I recommendation and level of evidence C.

Despite these recommendations, it is unclear whether the issue can be considered resolved, for a number of reasons. First, the guidelines were published in 2012, meaning that the data underlying the recommendations are even older. Since that time, there have been significant advances in the understanding of the technique and its results and complications. Second, the level of evidence of the recommendation—expert consensus—is the lowest in the ranking of scientific evidence and, thus, the most susceptible to changes. Moreover, this rating might be influenced by the characteristics of the experts consulted. In the present case, the overwhelming majority of the contributors to the guidelines, if not all, came from centers with on-site cardiac surgery.

Thus, the correct approach remains unclear. In areas of knowledge undergoing rapid changes, such as in the case of TAVI, the relevant recommendations must be frequently reviewed to combat obsolescence. Accordingly, a review of the management guidelines for valvular heart disease is being performed by the European Society of Cardiology. Their recommendations are pending.

Finally, as brought to light by Lozano et al., aortic stenosis treatment is going to be a complex problem in the immediate future and, as almost always happens, simple solutions such as "TAVI" or "no TAVI" according to the presence of on-site cardiac surgery will not be suitable. We consider the following questions to be important: whether it should be determined if certain types of patients can be treated in centers without on-site cardiac surgery; whether it would be more important to require a minimum number of annual implantations in centers performing TAVI, given the direct relationship between volume and results, as seen for other procedures[3]; and, finally, whether it would be as important or even more important to know the outcomes of each and every one of the programs underway, as well as their rates of success, mortality, and complications. Centers without on-site cardiac surgery that have a regulated program with appropriate patient selection might show excellent results, whereas centers with on-site cardiac surgery but an inadequate TAVI program might have unacceptable rates of mortality and/or complications.

In conclusion, we agree that the number of TAVIs will soon rapidly increase. We also agree that the availability of cardiac surgery as a prerequisite for a TAVI program is an idea that should at least be considered. However, we believe that it is much more important to explore in greater depth the categorization of patients and centers and their programs and there should be, as in other European countries, an obligatory national registry for all TAVI procedures in Spain, with decisions made on the information obtained. Unfortunately, this does not appear to be the chosen path.

CONFLICTS OF INTEREST

C. Morís is a proctor for CoreValve.

César Morís,* Isaac Pascual, and Pablo Avanzas

Área del Corazón, Hospital Universitario Central de Asturias, Oviedo, Asturias, Spain

*Corresponding author:
E-mail address: cmoris@uniovi.es (C. Morís).

Available online 4 February 2017

REFERENCES

1. Morís C, Pascual I, Avanzas P. Will TAVI be the standard of care in the treatment of aortic stenosis? *Rev Esp Cardiol.* 2016;69:1131–1134.
2. Joint Task Force on the Management of Valvular Heart Disease of the European Society of Cardiology (ESC), European Association for Cardio-Thoracic Surgery (EACTS)Vahanian A, et al. Guidelines on the management of valvular heart disease (version 2012). *Eur Heart J.* 2012;33:2451–2496.
3. López-Sendón J, González-Juanatey JR, Pinto F, et al. Indicadores de calidad en cardiología. Principales indicadores para medir la calidad de los resultados (indicadores de resultados) y parámetros de calidad relacionados con mejores resultados en la práctica clínica (indicadores de práctica asistencial). INCARDIO (Indicadores de Calidad en Unidades Asistenciales del Área del Corazón): Declaración de posicionamiento de consenso de SEC/SECTCV. *Rev Esp Cardiol.* 2015;68:976–1005.

SEE RELATED CONTENT:
http://dx.doi.org/10.1016/j.rec.2017.01.014
http://dx.doi.org/10.1016/j.rec.2016.09.012

http://dx.doi.org/10.1016/j.rec.2017.01.011
1885-5857/