EDITORIAL

Transcatheter aortic valve implantation in Poland: the journey of a thousand miles begins with a single step

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We read with interest the study by Dąbrowski et al, published in the current issue of Polish Archives of Internal Medicine (Pol Arch Intern Med).

In this interesting study, the authors assessed the development and spread of transcatheter aortic valve intervention (TAVI) in Poland through 11 years of experience in their country by an online survey composed of 94 single- and multiple-choice questions submitted to all 23 Polish TAVI sites. The authors found a significant increase in the volume of these procedures across all the centers from 2008 to 2019, with a major increase after the year 2015, when the Valve for Life Initiative was introduced. In 2019, among patients aged 65 years and older, TAVI reached a penetration rate of 18.65%. Transfemoral access was preferred in 93.5% of cases, while the most frequently used systems were Core Valve/EvoluTR (Medtronic, Minneapolis, Minnesota, United States) (57.7%), SAPIEN XT/3 (Edwards Lifesciences, Irvine, California, United States) (27.1%), and Accurate (Boston Scientific, Marlborough, Massachusetts, United States) (6.9%). Procedural outcomes were satisfying, with a low burden of procedural complications and a very good periprocedural management, although TAVI was performed mostly in high-risk patients with a relevant number of comorbidities and thus higher risk of short- and long-term complications.

As reported by the authors, in Poland the annual number of TAVI procedures per 1,000,000 inhabitants rose from 0.21 in 2008 to 40.38 in 2019. Since 2015, Poland has been one of the beneficiaries of the Valve for Life Initiative endorsed by the European Association of Percutaneous Cardiovascular Intervention which provided resources for the education of physicians, patients, and healthcare authorities. The long-term aim of the Valve for Life Initiative is to reduce disparities across Europe and increase the availability of effective treatment for valvular heart disease. This initiative has been extended into 2020 because of an ongoing need for a wider access to TAVI procedures even in high-risk patients in Poland. Although increasing through the years, the number of procedures is still suboptimal compared with other European countries in which TAVI procedures have been broadly adopted. The access remains limited by a yearly number of procedures reimbursed by the national health system and future efforts are needed to increase the reimbursement of transcatheter interventions across the entire country. Moreover, data on sex and social distribution of TAVI across the country would be of interest in order to investigate potential differences in the development of transcatheter techniques across different social categories and tailor specific healthcare campaigns.

According to the survey, inoperable and high-risk patients were treated in all centers, while 18 centers treated also intermediate-risk patients and only 5 centers admitted low-risk patients, with one-third of centers performing less than 50 procedures per year in total. Over the last decade, indications for a transcatheter approach have broadened to intermediate and low surgical risk patients with severe aortic stenosis, with promising results in this setting. The authors reported a low rate of intermediate-risk and, especially, low-risk patients treated with TAVI in Poland across the study period. Thus, the need to extend the procedure to lower-risk patients in the majority of cardiac centers across Poland may be one of the future directions of the Valve for Life Initiative. However, the extension of TAVI eligibility into patients at low surgical risk would mean that interventional cardiologists would have to minimize the risk for any possible complications. Consequently, it would require the presence of a strong and well-experienced Heart Team in every single center in order to optimize procedural planning and patient selection so as to reduce...
periprocedural complications and improve long-term outcomes and valve durability. 8–11 The development of the Polish TAVI consensus recommendations ensured the training, certification, and structure of the Heart Teams in Poland; however, as underlined by the authors, a repeated training may be needed in low-volume centers upon expanding the procedure to lower-risk patients in order to achieve the best results.

Finally, structured follow-up of patients varied between the centers in Poland and a TAVI-oriented clinic was established only in a single hospital. The quality of follow-up of TAVI patients is of pivotal importance so that the correct pharmacological therapy can be tailored for every single patient, the function of the implanted prosthesis can be assessed and the long-term durability of the devices can be evaluated, especially with regard to patients at lower surgical risk. Multiple hospitalizations after TAVI are common; they are often caused by heart failure and are associated with worse long-term outcomes. 12 Moreover, biological transcatheter prostheses are more prone to paravalvular leaks and structural valve degeneration, resulting in limited durability and in some cases leading to a reintervention. 13 The long-term efficacy of TAVI is still a matter of debate and studies or registries reporting outcomes beyond 5 years are scarce, which hampers the assessment of real incidence of transcatheter valve failure. 14 Future efforts in Poland are needed to implement a strict echocardiographic follow-up of patients after the procedure in order to allow an early diagnosis of prostheses failure and improve patients’ prognosis and quality of life.

Anyway, to paraphrase the famous quote of Lao Tzu, even the longest journey, as that of TAVI in Poland, begins with a single small step.

ARTICLE INFORMATION

DISCLAIMER The opinions expressed by the author are not necessarily those of the journal editors, Polish Society of Internal Medicine, or publisher.

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