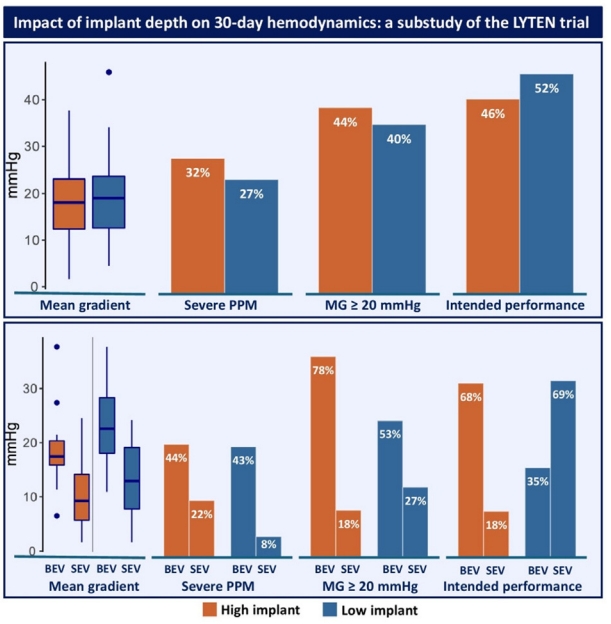
implant depth; mean gradient: 18.7 ± 8.7 mm Hg vs 18.5 ± 9.2 mm Hg (P = 0.866); severe prosthesis-patient mismatch (PPM): 32% vs 27% (P = 0.677); mean gradient ≥20 mm Hg: 44% vs 40% (P = 0.742); and intended valve performance: 46% vs 52% (P = 0.649). In patients with high implant depth, SEV presented better hemodynamics than BEV (Figure 1).



CONCLUSIONS In patients undergoing ViV-TAVR with BEV or SEV, implant depth had no impact on 30-day valve hemodynamics.

CATEGORIES STRUCTURAL: Valvular Disease: Aortic.

TCT-913

Procedural Aspects of Transcatheter Aortic Valve Replacement: Comparison Between Balloon-Expandable and Self-Expanding Devices

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BACKGROUND Transcatheter aortic valve replacement (TAVI) procedures show some fundamental differences, depending on the use of balloon-expandable (BEV) or self-expanding (SEV) valves. Still, these differences have not been quantified yet.

METHODS Consecutive patients from 5 centers, who underwent transfemoral TAVI procedure. Clinical and procedural were included characteristics were recorded and compared in relation to the used TAVI device.

RESULTS In total, 3,056 patients were included. Fifty-two percent were male and the mean age was 81 ± 9 years. A total of 1,198 (39%) patients were treated with BEV, while 1,858 (61%) with an SEV system. Patients receiving SEV were older (81 ± 9 vs 80 ± 8 years, respectively; P < 0.01) and were more often females (58% vs 33%, respectively; P < 0.01). On average 130 ± 65 mL contrast media was used, that was less for BEV than for SEV (103 ± 50 vs 147 ± 67 mL, respectively; P < 0.01). Overall total radiation time was 15 ± 9 min, which was markedly shorter for BEV than for SEV (13 ± 7 vs 17 ± 10 mins, respectively; P < 0.01). Nonretrievable and retrievable SEVs were comparable in terms of contrast use (146 ± 53 vs 148 ± 71 mL, respectively; P = 0.41), but both types of procedure required markedly higher, than for BEVs (P < 0.01 for both). Nonretrievable SEVs required less radiation (14 ± 7 vs 18 ± 10 min, respectively; P < 0.01), but still significantly more than for BEVs (P < 0.01).

CONCLUSION TAVI procedures with BEV require markedly less contrast than with SEV. This may be reasonable to consider during patient-tailored procedure planning.

CATEGORIES STRUCTURAL: Valvular Disease: Aortic.

Session: TAVR Techniques and Outcomes

TCT-914

Initial Experience With the Myval Balloon-Expandable Transcatheter Heart Valve in Argentina

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INTRODUCTION Transcatheter valvular therapy has revolutionized the treatment of structural cardiovascular pathology. The development of multiple devices offers the chance to choose the most appropriate prosthesis for each type of patient. Balloon-expandable valves can be used as percutaneous treatment for all four cardiac valves, and in particular, MyVal THV presents unique features that could be advantageous for these procedures.

OBJECTIVE Communicate the initial Argentine experience, including hemodynamic and clinical results, geographical description, and operator opinion, with the first 500 Myval balloon expandable valve in Argentina.

METHODS Prospective multicenter registry that included the first 500 patients undergoing percutaneous valve replacement in our country with the MyVal THV. The primary endpoint was procedural success and secondary endpoints included all-cause mortality, cardiovascular mortality, stroke, moderate or severe paravalvular leak, and new permanent pacemaker implantation at in-hospital evolution determined by Valve Academic Research Consortium-3 (VARC-3). Additionally, the opinions of the operators regarding the devices used were recorded.

RESULTS The mean age was 77.7 ± 6.3 years. The mean aortic valve area was 0.72 ± 0.38 cm, with a EuroSCORE II of 6.0 ± 2.3%. 93.6% of the implants were performed in the aortic position, 1.8% were in the tricuspid position, 3.2% in the pulmonary position, and 1.2% in the mitral position. 49.8% were performed with conventional sizes and 50.2% with intermediate or XL sizes. The procedural success was 98.7%. The maximum transaortic gradient decreased from 73 ± 16 to 6 ± 3 mm Hg. No patient presented severe paravalvular leak. The rate of permanent pacemaker implantation post-TAVR was 6.8%. The in-hospital mortality was 2.8%. One hundred twenty-one centers distributed in over 16/24 Argentine districts participated in the registry.

CONCLUSIONS Using the MyVal THV has resulted in safety and versatility, allowing adaptation to highly variable and complex technical scenarios. The large number of sizes available reducing the rate of complications, low incidence of pacemakers and expanding the therapy to almost all valve areas. The geographical distribution of the implants and the opinion of the operators demonstrates acceptance and satisfactory experience.