

Balloon aortic valvuloplasty with **Valver**[®] balloon catheter in adults with severe aortic stenosis as a bridge or palliative treatment.

Jacek Bil, Paweł Modzelewski, Agnieszka Pawlak, Robert J Gil
DEPARTMENT OF INVASIVE CARDIOLOGY, CENTRE OF POSTGRADUATE MEDICAL EDUCATION, POLAND

Published Online: July 2021 | DOI: 10.36740/WLek202107113

The aim

We aimed to assess the feasibility and safety of performing **balloon aortic valvuloplasty (BAV) with Valver[®] balloon catheter (Balton, Poland) in adults with severe aortic stenosis as a bridge or palliative treatment.**

- 8F access for Valver[®] diameter 20 mm
- significantly improved AS echo parameters
- no device-related periprocedural complications

Material and methods

We identified consecutive patients who underwent BAV procedures between May 2019 and March 2020 using Valver[®] balloon catheters. Demographic data, medical history, and clinical characteristics were retrospectively collected in all **study patients together with periprocedural data as well as 12-month follow-up data.**



Results

We included 18 patients. The mean population age was 78.1 ± 8.9 years, and women were 61.1%. The most common co-morbidities were arterial hypertension (88.9%), dyslipidemia (83.3%), and coronary artery disease (72.2%). The baseline mean aortic valve pressure gradient was 49.94 ± 27.02 mmHg and the mean aortic valve area (AVA) was 0.65 ± 0.20 cm². **In all cases, the procedure was performed from the femoral access via the 8F sheath. Two Valver[®] balloon catheter sizes were used 18x40mm (33.3%) and 20x40mm (66.7%) (Fig. 1).** Three periprocedural complications were ob



Balloon aortic valvuloplasty with **Valver**[®] balloon catheter in adults with severe aortic stenosis as a bridge or palliative treatment.

Jacek Bil, Paweł Modzelewski, Agnieszka Pawlak, Robert J Gil
DEPARTMENT OF INVASIVE CARDIOLOGY, CENTRE OF POSTGRADUATE MEDICAL EDUCATION, POLAND

Published Online: July 2021 | DOI: 10.36740/WLek202107113

served, and none was associated with the Valver[®] balloon catheter per se (Fig. 2). The transthoracic echocardiography after the procedure revealed a decrease in the mean pressure gradient of 11.1 ± 8.85 mmHg, and an increase in AVA of 0.21 ± 0.19 cm². At 12-month follow-up, the mortality rate was 38.9%.

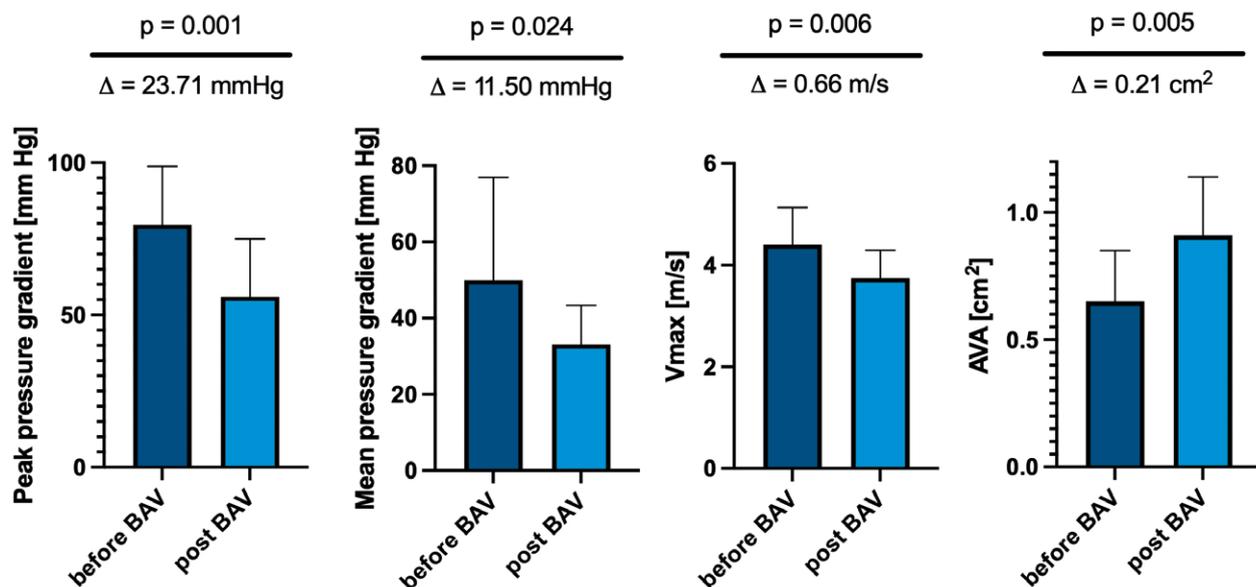


Fig. 2.

Conclusions

BAV is a procedure increasingly performed in catheterization laboratories worldwide. **This paper confirmed the safety of BAV with Valver balloon catheters in the modern era, showing a low incidence of valve and vascular complications.**

