



## Valvular Heart Disease

### INCIDENCE OF PROCEDURAL COMPLICATIONS IN 9271 CONSECUTIVE TAVI PATIENTS: ANALYSIS FROM THE GERMAN AORTIC VALVE REGISTRY

Oral Contributions

Room 152 B

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**Introduction:** Transcatheter aortic valve implantation (TAVI) has gained widespread acceptance to treat elderly high risk patients with aortic stenosis. We analyzed procedural complications based on all-comers Germany aortic valve registry (GARY) experience.

**Methods:** 9271 patients receiving TAVI were registered from 2011-12. Procedural complications, defined as any or combinations of the following, were present in 2018 patients (21.8%): Conversion to sternotomy or another approach, technically unsuccessful procedure, other procedural complications, residual aortic incompetence  $\geq 2+$ , need for additional PCI to treat complications of the procedure, or death during the procedure.

**Results:** Patient age was 81 years, 55% were female, left ventricular ejection fraction was 52%, logistic Euroscore I was 25.6% and German AV-Score 8.5%, respectively. Intraprocedural complications occurred in 1045 / 9271 patients (11.3%). Amongst them were malpositioning of the valve 2.4%, occlusion of a coronary ostium 0.3%, aortic dissection 0.24%, annular rupture 0.4%, pericardial tamponade 1.1%, left ventricular decompensation 1.2%, aortic incompetence  $\geq 2+$  1.2%, arrhythmias 2.8% and others 2%. 169/1045 patients (16.2%) of patients with intraprocedural complications died in-hospital. Patients were treated by a heart team (HT) in 49.4% and by one discipline (OD) only in 38.8%. Conversions to sternotomy were performed 124 patients, 92 treated by a HT (74.2%) versus 26 (21%) OD. Survival in the sternotomy subgroup was 62.1%. No conversion leading to death occurred in 85 patients, 42 (49.4%) treated by HT and 37 (43.5%) OD.

**Conclusions:** Intraprocedural complications of different severity occur in approximately every tenth patient receiving TAVI. In case of complications a true heart team approach may help to provide an optimal treatment option for these high risk patients.