



Valvular Heart Disease

GENDER DIFFERENCES AND IN-HOSPITAL OUTCOME IN PATIENTS UNDERGOING TRANSCATHETER AORTIC VALVE IMPLANTATION AND CONVENTIONAL SURGERY: INSIGHTS FROM THE GERMAN AORTIC VALVE REGISTRY

Poster Contributions

Hall C

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Background: Transcatheter aortic valve implantation (TAVI) has been rapidly adopted into clinical practice. However, gender differences in patients treated with TAVI or conventional aortic valve replacement (AVR) have been poorly investigated. The German Aortic Valve Registry (GARY) recruited for the first time patients undergoing TAVI or AVR and therefore offers the opportunity to evaluate the impact of gender.

Methods: From 2011 to 2012, 30,292 consecutive patients undergoing repair for aortic valve disease were prospectively enrolled into GARY. For the present analysis patients were divided into four categories: females treated with TAVI or AVR and males treated with TAVI or AVR.

Results: Female patients were more likely to be treated with TAVI ($n=5,118$ versus $4,153$), whereas the majority of male patients underwent AVR ($n=13,626$ versus $7,395$). On average, female patients were older than male patients (AVR: 71.9 versus 68.4 years; TAVI: 82.0 versus 79.7 years). Among those with AVR, concomitant coronary bypass surgery was more often performed in male patients (38.8 versus 28.2%). In the TAVI group the transfemoral access route was more often used among females (72.2 versus 63.3%). The rate of relevant aortic regurgitation (\geq II^o) was very low in the AVR group (0.4%). In the TAVI cohort significant aortic regurgitation was more often observed, but this was less frequent among female patients versus males (5.0 versus 7.2%). The procedural complication rate during TAVI procedures was higher in women, with at least twofold higher rates of coronary occlusions, pericardial tamponades, annular ruptures, and vascular complications. In contrary, male patients more often experienced residual aortic regurgitation \geq 2+. The incidence of in-hospital death was lowest in male patients with AVR (2.6%), followed by female patients with AVR (3.8%) and both TAVI groups (5.3% each).

Conclusions: Female patients undergoing repair for aortic valve disease were older and more likely to be treated with TAVI in comparison to their male counterparts. In-hospital mortality was higher in female patients treated with AVR, whereas mortality rates were similar in both groups treated with TAVI.