

Early and midterm outcomes after transaxillary versus transfemoral TAVI. data from the spanish TAVI registry

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Funding Acknowledgement: Type of funding source: None

Transaxillary access (TAX) has emerged as a less invasive alternative access when transfemoral access (TF) is not possible in patients undergoing TAVI. The primary endpoint of this study was to compare total in-hospital and 30-day mortality of patients included in the Spanish TAVI registry that were treated by TAX versus TF access.

Methods: All patients included in the Spanish TAVI registry who were treated by TAX or TF access were analyzed. In-hospital and 30-days outcomes were assessed using the Valve Academic Research Consortium definitions. An analyses by propensity score matching and multilevel logistic regression was performed for comparing both groups.

Results: A total of 6603 patients were included, of whom 191 (2.9%) were treated by TAX and 6412 were treated with TF access. After the adjustment, the device success was similar between both groups (94%, TAX vs

95%, TF p=0.95) as well as the rate of vascular complications (11.9% TAX vs 11.9 TF; p=0.78), bleeding (7.7% TAX vs. 7.9% TF; p=0.62) and stroke (4.2% TAX vs. 2.0 TF; p=0.09). However, in-hospital and 30-day mortality was significantly higher in TAX access group versus TF 2.19 (1.13–4.26); p=0.02 and 2.11 (1.08–4, 13); P=0.02, respectively. Similarly, the rate of acute myocardial infarction 5.05 (1.94–13.1); p=0.001, renal complications 2.07 (1.19–3.60; p =) 0.01 and pacemaker implantation 1.56 (1.01–2.40); p=0.04 was higher in the TAX group versus TF.

Conclusions: Transaxillary access compared to transfemoral access is associated with an increase in total in-hospital and 30-day mortality, as a result TAX access should be considered only in those cases in which TF is not possible