Incidence of Vascular complications among Egyptian population during trans femoral Aortic Valve Implantation

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ABSTRACT

BACKGROUND

OBJECTIVE
To describe the incidence of vascular complications in trans femoral TAVI patients, based on the VARC criteria, and to identify predictors of these serious events among the Egyptian population.

METHODS
We performed a prospective cohort study of 30 consecutive transfemoral TAVI recipients. Vascular complications were defined by the Valve Academic Research Consortium (VARC) criteria.

RESULTS
In our cohort of elderly patients (74.17 ± 8.828 years), the logistic Euro Score was 25.8% 11.9%. The Edwards valve was used in 7 cases, the Core Valve in 20, and Evolute R valve in 3 cases. Ejection fraction assessed by ECHO was 58.27 ± 10.540. The minimal Rt femoral artery diameter was 10.0 ± 1.9 mm. Tortuosity of Rt femoral artery was observed in 5 cases. Vascular complications were observed in 7 patients (23.3 %). The other 23 (76.7 %) patients had no post-procedural complication. (VARC major: 2 (6.7 %), minor: 5 (16.7 %)). There was significant difference between low Ejection fraction, minimal luminal diameter, vascular tortuosity, and incidence of vascular complications.

CONCLUSION
Vascular complications in trans femoral TAVI remain a significant issue despite improving center experience and smaller delivery systems. Vascular complications defined by VARC can be predicted by information from baseline and Procedural Characteristics of the patients. so good selection of patient may improve TAVI-related outcomes.

KEYWORDS
transcatheter aortic valve implantation