CONCLUSIONS In this multi-site and multi-operator experience data, robotic PCI was more commonly done via the radial rather than the femoral access. Robotic PCI technical success was higher in the TRA group. Clinical success was high and similar by using either the femoral or radial access for robotic PCI. These observations support the concept that trans-radial robotic PCI is feasible and highly successful.

CATEGORIES OTHER: Vascular Access: Transradial
KEYWORDS Percutaneous coronary intervention, transradial, Percutaneous transfemoral approach, Robotics

TCT-436 Percutaneous removal using Perclose ProGlide closure devices versus surgical removal as weaning strategy after percutaneous cannulation for venoarterial Extracorporeal Membrane Oxygenation

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BACKGROUND The removal of arterial cannula using a percutaneous device has not been reported in patients underwent venoarterial extracorporeal membrane oxygenation (ECMO). We investigated the procedural outcomes and complications of percutaneous device closure versus surgical closure for hemostatic control of the arterial access site in weaning venoarterial ECMO.

METHODS Between September 2012 and December 2014, a total of 115 patients with ECMO weaning by percutaneous or surgical access were included to the analysis. The CoreValve device could not be successfully closed and the artery was closed in the following angio-CT findings were considered a high risk for percutaneous approach: 1) Severe calcifications at the puncture site 2. Diffuse atherosclerotic disease with a large plaque burden 3. Inability to perform contralateral injection-controlled puncture. All patients with such characteristics were pre-planned to surgical cut-down approach. The study cohort was divided into two subgroups A - patients treated between September 2010 to December 2012 before introduction of the tailored vascular access program (n=35) and group B - patients treated from January 2013 till December 2014 (n=65). All patients in group A were treated with percutaneous and puncture device closure. Group B comprised of 47 patients with percutaneous access and 18 patients in whom surgical approach was chosen.

RESULTS A total of 100 patients (mean age 79.6±6.5 years, range 57 to 91, 45% male) with femoral access were included to the analysis. The CoreValve prosthesis was implanted in 95 patients (95%) and Lotus in 4 patients (4%). In one case the prosthesis was not implanted because the patient died during procedure after wire positioning. In one patient with Prostar closure the device could not be successfully closed and the artery was closed in the surgical manner. Vascular access site complication rate significantly decreased from 34.3% in the group A (n=12) to 6.2% in the group B (n=4) (p=0.0005). Both minor and major access complications were more frequent in the group A than in the group B, and the result was statistically significant (p=0.03 and 0.02, respectively). Both groups did not differ much in terms of baseline characteristics and risk evaluated on the basis of risk score calculators. Arterial hypertension and prior myocardial infarction were more common in the group B. In-hospital mortality was 11.4% (n=4) in the group A and 1.5% (n=1) in the group B (p=0.02). Two deaths were related to access site complications in the group A, one in the group B.

CONCLUSIONS The introduction of tailored vascular access program resulted in significant reduction in both minor and access site complications. The pre-procedural access screening with qualification to closure-device or surgical cut-down approach seems to be the most important step to reduce the vascular complication rate.

CATEGORIES ENDOVASCULAR: Complications
KEYWORDS Complication, TAVI, Transfemoral