OBJECTIVES To evaluate in-hospital and long-term effectiveness of endovascular aortic repair for Stanford B aortic dissection between different genders.

METHODS From April 2002 to February 2013, a total number of 296 patients with Stanford B aortic dissection treated with endovascular repair in General hospital of Shenyang Military Region. To compare clinical features, in-hospital and outcomes in follow-up for 3 years in different genders.

RESULTS There was no significant difference between different genders in clinical characteristics. However, compared with female group, the male group had higher rate in smoking and drinking, and lower rate in back pain and coma occurred. There were no significant difference in stent grafts characteristics and in-hospital complication. During the in-hospital and follow-up, compared with female group, the complication of all-cause mortality, reintervention, coronary disease, cerebrovascular diseases in male group also had no significant difference.

CONCLUSIONS In our study, the clinical outcomes of in-hospital and follow-up was no significant difference between different gender patients with Stanford B aortic dissection treated with endovascular aortic repair.

GW28-e1185

Comparison of Long-Term Outcomes in Patients With Stanford B Aortic Dissection Treated with Endovascular Aortic Repair with or without Statins

Yanjie Liu,[1] Wang XiaoZeng,[1] Wang Ya,[1] Zhou TieNan,[1] He RuiXia,[1] Jing QuanMin,[1] Wang Shuang[1]
[1]Department of Cardiology, Institute of Cardiovascular Research, General Hospital of Shenyang Military Region, Shenhe District, Shenyang, Liaoning, China

OBJECTIVES To assess the long-term outcomes in patients with Stanford B aortic dissection treated with endovascular aortic repair with or without statins.

METHODS A retrospective review was performed on 388 Stanford B aortic dissection patients treated with endovascular repair in our department from April 2002 to October 2013. The patients were divided into two groups: statins group (118 cases) and non-statins group (270 cases). The baseline clinical features, laboratory data, in-hospital and long-term outcomes between the two groups were compared.

RESULTS The incidence of hypertension and coronary heart disease (CHD) in the statins group was significantly higher than non-statins group ($P = 0.027$, $P < 0.001$). However, there was no differences between other clinical features($P > 0.05$). Compared with the non-statins group, the usage rate of aspirin is higher in statins group ($P < 0.001$). There were no significant difference in stent grafts characteristics and in-hospital complication. The mortality in-hospital of the non-statins group was higher than the statins group, but the differences were no statistically significant ($P = 0.184$). Through Kaplan-Meier analysis, the survival rate between two groups had no significant difference ($P = 0.472$).

CONCLUSIONS In our study, we conclude that statins, at the beginning of the trial, cannot improve in-hospital and long-term outcomes in patients with Stanford B aortic dissection treated with endovascular aortic repair.

GW28-e1193

The GRACE risk score has better prediction accuracy for new-onset atrial fibrillation than CHA_2DS_2-VASc score in patients with ST-segment elevation myocardial infarction

Jiachen Luo,[1] Liming Dai,[1] Jianming Li,[2] Jinlong Zhao,[1] Yong Li,[1] Guli Maihe,[1] Xiaoming Qin,[1] Hongqiang Li,[1] Baoxin Liu,[1] Yidong Wei[1]
[1]Shanghai Tenth People's Hospital, Tongji University; [2]University of Minnesota, VA Medical Center

OBJECTIVES To test the hypothesis that the GRACE risk score (age, heart rate, systolic blood pressure, Killip class or diuretic usage, baseline creatinine or renal failure, ST-segment deviation, elevated troponin or other necrosis cardiac biomarkers and cardiac arrest at admission) was better at predicting in-hospital new-onset AF (NOAF) compared with CHA_2DS_2-VASc score (congestive heart failure, hypertension, age≥75years, diabetes, prior stroke or transient ischemic attack, vascular disease, 65 to 74 years of age, female) in patients with ST-segment elevation myocardial infarction (STEMI).

METHODS We recruited 492 consecutive STEMI patients (21% female; median age, 64 years) from May 1, 2015 to October 1, 2016, none of whom had a history of AF. During hospitalization, all patients were monitored and AF episodes lasted for at least 30s were recorded. Model performance and calibration were assessed with the C-statistic and Hosmer-Lemeshow test, respectively.

RESULTS During a median in-hospital periods of 7 (interquartile range, 5 to 9) days, 49 patients (10%) presented with a NOAF event, and 7 of these patients died (14%). Based on the C-statistic, GRACE risk score (C-statistic: 0.76±0.03) had a better model performance than that of CHA_2DS_2-VASc score (C-statistic: 0.68±0.04) (comparison, $p=0.03$), and both scoring systems demonstrated excellent calibration (all p values in H-L test >0.1).

CONCLUSIONS Among STEMI patients without a medical history of AF, the GRACE risk score appeared to be superior to the CHA_2DS_2-VASc score for predicting in-hospital NOAF. Enhanced short-term monitoring for detecting post-MI NOAF may be targeted to patients with higher GRACE risk scores. Further prospective studies are needed to validate its clinical utility.

GW28-e1194

The role of new-onset atrial fibrillation after myocardial infarction in increasing cardiovascular risk: a systematic review and meta-analysis

Jiachen Luo,[1] Liming Dai,[1] Jianming Li,[2] Jinlong Zhao,[1] Yong Li,[1] Guli Maihe,[1] Xiaoming Qin,[1] Hongqiang Li,[1] Baoxin Liu,[1] Yidong Wei[1]
[1]Shanghai Tenth People's Hospital, Tongji University; [2]Minneapolis Veterans Affairs Medical Center

OBJECTIVES Recent studies provide conflicting evidence regarding the CV risk associates with myocardial infarction (MI) patients complicating new-onset atrial fibrillation (NOAF). This study aimed to explore the association between post-MI NOAF and CV risk in percutaneous coronary intervention (PCI) era.

METHODS We performed a systematic search of published articles by using MEDLINE, EMBASE and CENTRAL databases (January 1, 1990 to October 31, 2016) without language restrictions. Studies reported hazard odds (HRs) with 95% confidence intervals (CIs) for the associations of interest were included.

RESULTS Twenty-one studies involving 328,201 MI patients were identified. Participants developing NOAF experienced an increased risk of major adverse cardiovascular events (MACEs) (HR: 1.35, 95%CI: 1.18 to 1.54), all-cause death (HR: 1.40, 95%CI: 1.24 to 1.58), stroke (HR: 2.28, 95%CI: 1.69 to 3.09), recurrent MI (HR: 1.55, 95%CI: 1.03 to 2.32), heart failure (HR: 3.18, 95%CI: 2.90 to 3.49), cardiogenic shock (HR: 2.88, 95%CI: 2.35 to 3.53) and major bleeding (HR: 2.44, 95%CI: 1.55 to 3.83). In subgroup analysis, ST-segment elevation MI patients with mean age< 65yrs (HR: 1.03, 95%CI: 0.86 to 1.23), as well as MI patients received PCI (HR: 1.29, 95%CI: 0.96 to 1.74) complicating with NOAF was not significantly associated with increased risk of all-cause death.

CONCLUSIONS Post-MI NOAF is associated with increased CV risk. Specifically designed predictive models are warranted to evaluate the ischemic and hemorrhagic risk, and studies should be conducted to explore the optimal anti-thrombus strategy in this setting.