VALIDATION OF THE GLOBAL RISK CLASSIFICATION FOR PREDICTION OF LONG-TERM OUTCOME AFTER UNPROTECTED LEFT MAIN CORONARY REVASCULARIZATION

ACC Moderated Poster Contributions
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Background: The global risk classification (GRC) was created to incorporate clinical variables into angiographic SYNTAX score by combination with EuroSCORE. This study aimed to validate the ability of the GRC score to predict long-term outcome in patients underwent unprotected left main coronary artery (ULMCA) revascularization.

Method: The GRC and SYNTAX score were calculated for 1,146 patients in a large multicenter registry who underwent percutaneous coronary intervention (PCI) with drug-eluting stent (n=645) or coronary artery bypass graft (CABG) (n=501) for ULMCA stenosis. The outcomes of interests were 5-year incidences of major adverse vascular events (MAVE), including death, Q-wave myocardial infarction, and stroke.

Results: The incidences of 5-year MAVE according to the GRC were 5.4% in the low, 13.5% in the intermediate, 43.8% in the high risk group (p<0.001) after PCI and 7.3% in the low, 15.6% in the intermediate, 36.0% in the high risk group (p<0.001) after CABG. The MAVE rates according to the SYNTAX score were 6.0% in the lowest (<23), 9.6% in the intermediate (23~32), 23.2% in the highest (>32) score group (p<0.001) after PCI. However, after CABG, the MAVE rate (14.8%) of the lowest SYNTAX score group was higher than that (9.6%) of the intermediate score group (20.8% in the highest score group, p=0.04). The C-indexes of GRC and SYNTAX score were 0.704 and 0.671 in the PCI group, 0.638 and 0.566 in the CABG group, respectively.

Conclusions: For patient with unprotected LMCA disease, the GRC showed a significantly improved predictive ability as compare with SYNTAX score after percutaneous or surgical revascularization.