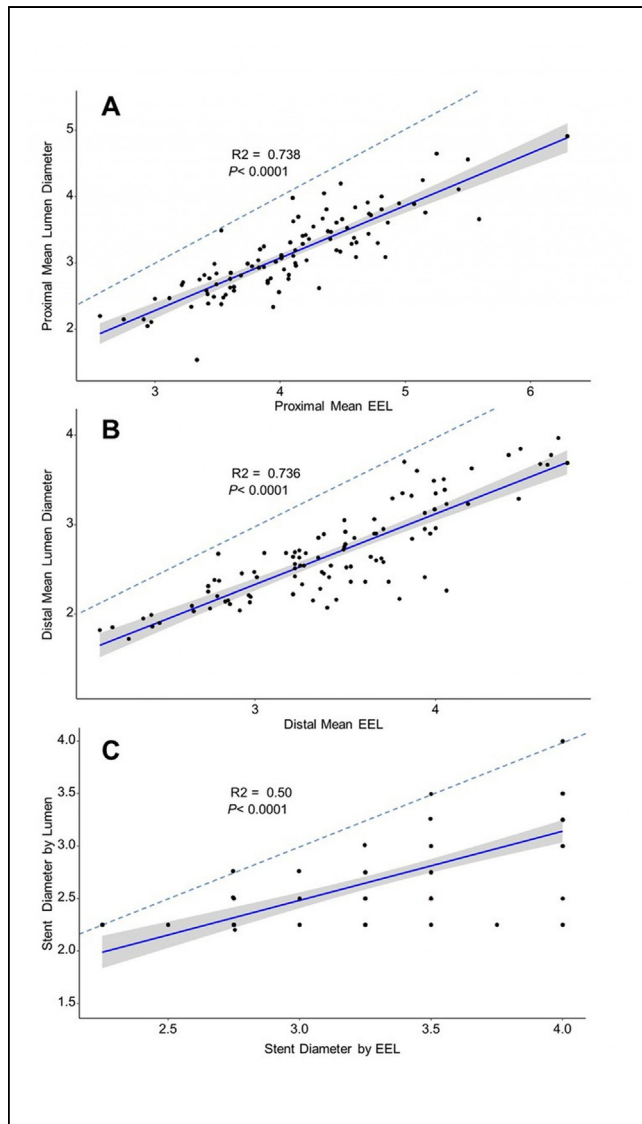


MLD led to selecting a smaller diameter stent in 91% of cases. The magnitude of under-sizing was $\geq 0.25\text{mm}$ in 10%, $\geq 0.50\text{mm}$ in 34%, $\geq 0.75\text{mm}$ in 31% and $\geq 1.0\text{mm}$ in 16% ($p < 0.001$).



CONCLUSION EEL-based stent-sizing leads to selection of a significantly larger diameter stent compared to MLD-based stent sizing. Studies examining the clinical correlation of this finding are warranted.

CATEGORIES IMAGING: Imaging: Intravascular

CTO LONG-TERM OUTCOMES

Abstract nos: 298 - 302

TCT-298

Incidence, Predicting Factors, and Clinical Outcomes of Periprocedural Myocardial Infarction after Percutaneous Coronary Intervention of Chronic Total Occlusion in the new-generation drug-eluting stents era

Jin-Ho Kim,¹ Byeong-Keuk Kim,² Chul-Min Ahn,³ Jung-Sun Kim,⁴ Young-Guk Ko,⁵ Donghoon Choi,² Myeong-Ki Hong,² Yangsoo Jang²

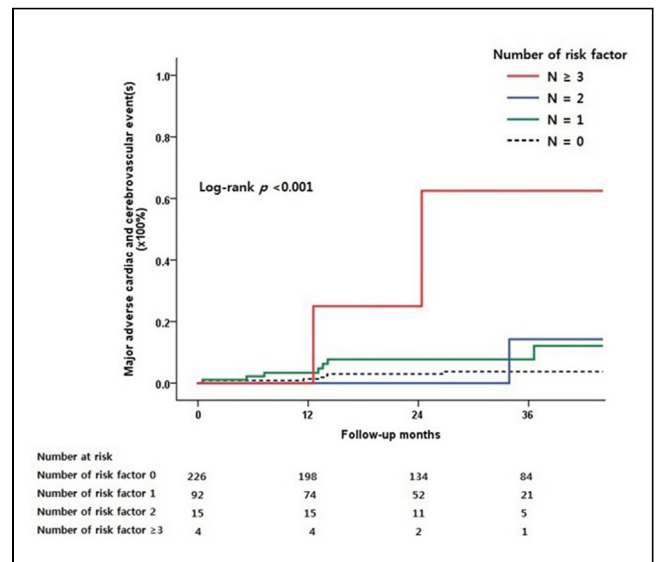


¹Department of Internal Medicine, Konkuk University School of Medicine, Chungju, Chungbuk, Korea, Republic of; ²Division of Cardiology, Departments of Internal Medicine, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of; ³Division of Cardiology, Departments of Internal Medicine, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of; ⁴Yonsei University College of Medicine, Seoul, Korea, Republic of; ⁵Divisions of Cardiology, Departments of Internal Medicine, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of

BACKGROUND Limited data exists on the clinical implications of periprocedural myocardial infarction (PMI) after chronic total occlusion (CTO) intervention in the new-generation drug-eluting stents (DESs) era. This study aimed to examine predicting factors, and clinical outcomes of PMI after CTO intervention.

METHODS We finally enrolled 337 patients who underwent CTO intervention and met the study criteria. We evaluated the incidence of PMI, defined as creatine kinase-MB increase $\geq 3\times$ the upper normal limit after intervention and compared the occurrence of major adverse cardiac and cerebrovascular events (MACCE), defined as the composite of cardiac death, myocardial infarction, stent thrombosis, target-vessel revascularization, or cerebrovascular accidents, between the PMI and non-PMI groups.

RESULTS PMI occurred in 23 patients (6.8%) after CTO intervention. The independent predictors for PMI were previous bypass surgery (OR=5.52, 95%CI=1.17-25.92; $p=0.03$), Japan-CTO score ≥ 3 (OR=7.06, 95%CI=2.57-19.39; $p < 0.001$), side branch occlusion on final angiogram (OR=4.21, 95%CI=1.13-15.66; $p=0.03$), and longer total procedure time (OR=4.18, 95%CI=1.35-12.99; $p=0.01$). During follow-up (median 29.6 months), the PMI group showed a significantly higher MACCE rate than the non-PMI group (23.7% vs. 5.6%; $p=0.008$, log-rank test). PMI was an independent predictor of MACCE (HR=4.11, 95%CI=1.30-12.91; $p=0.01$). MACCE rate gradually increased depending on the peak CK-MB level and was the highest in patients with $\geq 10\times\text{UNL}$ ($p=0.005$).



CONCLUSION Previous bypass surgery, high Japan-CTO score, side branch occlusion, and longer procedure time were strongly related to the occurrence of PMI after CTO intervention. PMI was significantly associated with worse clinical outcomes in new-generation DESs era.

CATEGORIES CORONARY: PCI Outcomes

TCT-299

Impact of Complete Revascularization on Long-term Clinical Outcomes in Chronic Total Occlusion Patients with Multi-vessel Disease

Ji Bak Kim,¹ Seung-Woon Rha,² Byoung Geol Choi,² Se Yeon Choi,² Jae Kyeong Byun,² Ahmed Mashaly,³ Won Young Jang,²

