

¹Korea University Guro HospitalHu Li¹,Seung-Woon Rha¹,Jae Kyeong Byun¹,Se Yeon Choi¹,Byoung Geol Choi¹,Jin Oh Na¹,Cheol Ung Choi¹,Hong Euy Lim¹,Jin Won Kim¹,Eung Ju Kim¹,Chang Gyu Park¹,Hong Seog Seo¹,Dong Joo Oh¹

Background: There are very limited data regarding the benefit of percutaneous coronary intervention (PCI) for chronic total occlusion (CTO) patients (pts) with near-normal left ventricular (LV) function. **Methods:** A total of 194 consecutive CTO patients with normal or near-normal LV function (EF>50%) underwent PCI or optimal medical therapy (OMT) were enrolled. The patients were divided into two groups; 1) the OMT group (n=86) and 2) the PCI group (n=108). To adjust for potential confounders, analysis was performed using the logistic regression model. **Results:** Baseline clinical characteristics were similar between the two groups, Major clinical outcomes up to 5 years were significant different; Total major adverse cardiac events (MACE 30.2% vs. 13.9%, p=0.012), total death (11.6% vs. 1.9%, p=0.009), cardiac death or MI (16.3% vs. 13.9%, p=0.012) (Table). **Conclusions:** In this study, PCI for a CTO patients even with normal or near-normal LVEF has a beneficial effect in reducing the incidence of individual and composite MACE up to 5 years.

Table. Cumulative Incidence of Clinical Outcomes Up to 5 Years

Variables, %	OMT (n=86)	PCI (n=108)	p-Value
Total death	11.6%	1.9%	0.009
Cardiac death or MI	16.3%	2.8%	0.020
Stroke	2.3%	1.9%	0.848
Revascularization	20.9%	13.6%	0.163
Target lesion (CTO vessel)	9.1%	8.3%	0.919
Target vessel (CTO vessel)	9.1%	8.3%	0.919
Total MACE	30.2%	13.9%	0.012

Major adverse cardiac events (MACE) was defined as the composite of total death, myocardial infarction, stroke and revascularization.