**COMPARISON OF INTERVENTION WITH DRUG ELUTING STENT AND MEDICAL TREATMENT IN PATIENT WITH CHRONIC TOTAL OCCLUSION**

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Background: Chronic total occlusion (CTO) is a challenging entity in the coronary intervention. With improvements in technology and techniques, success rates for percutaneous coronary intervention (PCI) of CTO continue to improve. However, the clinical benefits of PCI remain unclear. The aim of the study was to determine the effectiveness of PCI using drug eluting stent in patients with CTO on clinical outcomes.

Methods: From 2004 to 2010, we analyzed 898 patients with at least one CTO who underwent successful PCI or only medical treatment from multicenter registry. Results: PCI for CTO was successful in 423 patients (47%) and 435 lesions (45%). Patients treated with successful PCI were more likely to have LAD CTO and lower ejection fraction and less likely to have myocardial infarction at presentation and RCA CTO. During a median of 24.2 month, there were 43 (10.2%) deaths after successful PCI compared to 81 deaths (17.4%) of 465 patients after medical treatment. However, after the multivariable adjustment, PCI was not associated with improvement in mortality (Hazard Ratio[HR] 0.859, 95% confidence interval[CI] 0.516-1.431, p=0.560) , myocardial infarction (MI) (HR 0.256, 95% CI 0.02-3.325, p=0.298) or composite of death and MI (HR 0.743, 95% CI 0.702-1.325, p=0.241)

Conclusions: In patients considered for CTO intervention, medical treatment appears to be associated with a similar outcome in mortality and myocardial infarction compared to successful PCI. However, given the observational nature of this study, randomized clinical trials are needed to confirm these findings.