

Prognosis of Totally Occluded Infarct Related Artery Can be Worse than Non-totally Occluded in Acute Non-ST Elevation Myocardial Infarction patients?

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Background: There are limited data regarding the prognosis of acute non-ST segment elevation myocardial infarction (NSTEMI) patients (pts) with total occlusion of infarct-related artery (IRA) **Methods:** The study population consisted of 2,858 consecutive acute NSTEMI pts enrolled in the Korea Acute Myocardial Infarction Registry We compared the clinical outcomes of NSTEMI pts with total occlusion in IRA (TIMI 0,1,) to those of pts with non-total occlusion in IRA (TIMI 2,3) who underwent percutaneous coronary intervention (PCI) with DES. **Results:** The baseline clinical and procedural characteristics were balanced between groups. 12 month major clinical outcomes including mortality, repeat revascularization, and total major adverse cardiac events (MACE) were similar between the two groups except recurrent NSTEMI were significantly higher in pts with total occlusion group after the multivariate analysis (Table). **Conclusion:** The prevalence of total occlusion of IRA was significant proportion (40%) in the acute NSTEMI setting and showed similar one year major clinical outcomes regardless of IRA patency at presentation except more cumulative recurrent NSTEMI in the total occlusion group.

Table. Twelve-Month Clinical outcomes (on Multivariate analysis)

Variables, N (%)	Non-total Occlusion Group (n=1699 pts)	Total Occlusion Group (n=1159 pts)	P value
Total deaths	43 (2.5)	18 (1.6)	0.177
Cardiac Deaths	23 (1.4)	8 (0.7)	0.430
Any MI	13 (0.8)	12 (1.0)	0.180
STEMI	6 (0.4)	0 (0.0)	0.990
NSTEMI	7 (0.4)	12 (1.0)	0.029*
Repeat Revascularization	84 (4.9)	70 (6.0)	0.960
TLR-PCI	44 (2.6)	19 (1.6)	0.350
TVR-PCI	56 (3.3)	30 (2.6)	0.429
CABG	2 (0.1)	3 (0.3)	0.970
Total MACE	141 (8.3)	103 (8.9)	0.990