



POST-PROCEDURAL HYPOTENSION AFTER PRIMARY PERCUTANEOUS CORONARY INTERVENTION IN ST ELEVATION MYOCARDIAL INFARCTION

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Session Title: Acute Coronary Syndromes: STEMI Abstract Category: 1. Acute Coronary Syndromes: Clinical

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Background: The clinical significance of post-procedural hypotension has not been evaluated in patients with STEMI after successful primary PCI.

Methods: Total of 236pts with STEMI who underwent primary PCI were reviewed. Pts who presented with cardiogenic shock before or during PCI were excluded. Echocardiography was done within 48hrs. All pts underwent VH-IVUS imaging of culprit lesion.

Results: Among 236pts, 54pts presented with hypotension after successful primary PCI. The incidence of hypertension was similar. Peak troponin-l and CK-MB were similar, and TIMI grade before PCI was lower in hypotensive group(p=0.004). However, door to balloon time and symptom to balloon time were longer in hypotensive group (p=0.004 and p<0.0001). Ejection fraction was lower in hypotensive group(p< 0.0001). Minimal lumen area (MLA) was smaller and maximal necrotic core(%) was larger in hypotensive group, but the incidence of VH-TCFA was similar(56% vs 42%, p=0.505). By logistic multivariate regression analysis, the most important independent predictors of post-procedural hypotension were longer symptom to balloon time (OR 1.012, p= 0.0093) and percent maximal necrotic core (OR 1.244, p =0.018). However, there were no significant differences in the 30days and 1yr MACCE of these two group.

Conclusions: Post-procedural hypotension after successful primary PCI was predicted by delayed reperfusion time and prominent necrotic core of culprit lesion, although it results in no difference of patient's outcome.

	post-PCI hypotensive STEMI (n=54)	post-PCI normotensive STEMI (n=182)	p-value
Lesion length (mm)	25.44 ± 9.14	20.92 ± 8.76	0.009
Distal reference lumen area (mm²)	2.99 ± 0.42	3.19 ± 0.47	0.026
Lumen area (mm²)(MLA site)	2.80 ± 0.82	3.38 ± 2.18	0.048
Remodeling index (max. NC site)	1.41 ± 0.61	1.27 ± 0.34	0.279
% Fibrotic area(max. NC site)	50.75 ± 13.47	63.11 ± 15.44	<0.0001
% Fibrofatty area(max. NC site)	5.65± 6.58	11.45 ± 7.64	<0.0001
% Necrotic core area (max. NC site)	33.50 ± 14.84	18.25 ± 12.26	<0.0001
% Dense calcium area (max. NC site)	10.09 ± 7.41	7.18 ± 7.91	0.102