

The long-term clinical outcomes [3 years] among STEMI patients treated with primary PCI: Mortality insights from a large single-center registry

Assali, A; Lev, E; Vaknin-Assa, H; Brosh, D; Teplitsky, I; Rechavia, E; Sela, O; Butto, N; Shor, N; Dvir, D; Solodky, A; Porter, A; Iakobishvili, Z; Hasdai, D; Strasberg, B; Battler, A; Kornowski, R

Rabin Medical Center, Petach Tikva, Israel

Background and Aims: Cumulative evidence has demonstrated that rapid primary percutaneous coronary intervention (PPCI) is the most effective reperfusion strategy for acute STEMI. However, the long-term benefits of PPCI have not been known exactly. The goal of this study was to examine the long clinical outcomes after PPCI.

Methods: Our registry consisted of consecutive 1102 patients with STEMI treated with PPCI. Three-year follow-up evaluation was performed. All pts treated using primary PCI for STEMI within 12 hours of chest pain were included.

Results: Median time to death 56 [5-462] days.

	1-year	2-year	3-year
Death	14%	17%	19%
Re-MI	7.1%	7.6%	8.3%
Stent thrombosis	3.3%	3.7%	3.7%
TVR	12%	15%	16%
CABG	5.5%	5.9%	6.2%
MACE	28%	32%	35%

After multivariate analysis including all factor associated with 3- year mortality in uni-variate analysis [$p < 0.05$] the following factors were statistically significant factors predicting 3 year mortality:

	OR	95 % CI	P-value
Age > 65 y	1.5	1.1-2.2	0.04
GFR (<60 mL/min/1.73 m ²)	1.7	1.3-2.2	0.005
Killip class >1	1.9	1.5-2.5	0.00
Final TIMI3	0.4	0.2-0.95	0.04
LVEF <40%	1.4	1.2-1.7	0.003

Conclusions: Our results show that the majority of death occurs in the first year following STEMI. Older age, high killip class, impaired renal function, and depressed left ventricular function are significant factors associated with poor outcomes while successful angiographic PPCI improve this outcome.