

The Impact of the Mode of Transportation to the Hospital on the Short-Term Outcome of Patients Presenting with STEMI: Findings of the ACSIS 2008

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Background: Short decision time for early alert to call for medical help and consequent rapid hospital arrival of patients presenting with STEMI may result in improved outcome.

Objectives: To compare and characterize the management and outcome of STEMI patients who participated in the bi-monthly biannual Acute Coronary Syndrome In Israel Survey (AC SIS) 2008 according to mode of transportation to hospital.

Results: Selected epidemiological, clinical, management and outcome parameters of 657 patients who fulfilled entry criteria are presented:

	MICU (n=400)	PRIVATE CAR (n=257)	P Value
Age (median, year)	59	58	0.382
Males (%)	81	86	0.061
Previous MI (%)	23	21	0.684
Previous AP (%)	19	29	0.003
Prior revascularization (%)	25	25	0.964
Diabetes (%)	25	32	0.049
Hypertension (%)	46	51	0.253
Killip class 1-2 (%)	56	36	0.018
Time from onset of symptoms to seeking help (median, minutes)	61	120	0.001
Time from call to ER arrival (median, minutes)	49	74	0.001
Any primary reperfusion therapy (%)	71	56	0.001
Time from arrival to PCI (median, minutes)	59	79	0.001
1 st ward CCU/Cardiology (%)	62	38	0.011
TIMI flow 3 (%) for those with PCI	66	34	0.038
PCI during hospitalization (%)	93	86	0.006
EF >40% at discharge (%) (n=543)	76	74	0.012
7-day mortality (%)	3	2	0.340
30-day mortality (%)	4.6	2.8	0.245

Conclusion: An appreciably large proportion of patients with ACS reach the hospital by private car. Yet, more patients transported by MICUs are discharged with more preserved cardiac function. The public and out-of-hospital care providers should be strongly recommended to use an MICU, which is associated with better outcome.