

In hospital mortality for prehospital patients directly admitted to cath-lab beyond 120 min

L.Rebillard¹, N. Danchin², A. Loyeau³, L. Lamhaut⁴, J.-M. Juliard⁵, S. Bataille³, F. Lapostolle⁶, Y.Lambert⁷

(1) SAMU77-Hôpital de Melun, France, (2) HEGP, Paris, France, (3) Health Regional Agency of Ile de France, Paris, France, (4) SAMU75-University Hospital of Necker, Paris, France, (5) University Hospital Bichat-Claude Bernard, Paris, France, (6) University Hôpital Avicenne, Bobigny, France, (7) SAMU78-Hospital of Versailles, France

Background

Improving timely access to life saving reperfusion therapy is well recognized as major goal of STEMI care. Primary PCI is the recommended reperfusion therapy if performed by an experienced team within 120 min. of FMC

Aim

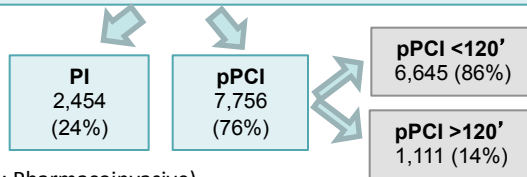
To assess the impact of delay on in-hospital mortality of STEMI patients transported by MICU for pPCI.

Population

23,451 STEMI patients transported by MICU



10,210 patients with uncomplicated STEMI, primary MICU transportation, <12H, with reperfusion decisions & no death during transport



(PI: Pharmacoinvasive)

Methods

e-MUST registry is a regional continuous registry set-up in 2003 by the regional health authority of the greater Paris area in France (ARSIF), covering a population of 12 million people. Prospective collection of data on STEMI patients ≤24 hours from symptom onset and transported by the physician-staffed MICU dispatched by the SAMU, after emergency calls. MICU emergency physicians initiate treatment in the pre-hospital setting and take the initial decision of reperfusion therapy. Data collected in the field on paper forms, then entered into a computerized database. An external audit of 7% of the records is held annually. Completeness of recruitment is 90%.

Data for this study includes all STEMI <12h managed by MICUs, from 2003 to 2013. Ambulance triage and direct transport to pPCI capable hospital by-passing ED. Data of in-hospital mortality for group 1 with FMC to cath-lab<120 min. and for group 2 with FMC to cath-lab>120 min. were compared using Chi 2 test.



NO CONFLICT OF INTEREST

CONCLUSION

Increase of in-hospital mortality for unselected STEMI patients transported from scene to cath-lab is strongly correlated to time to pPCI beyond 120 min., out of recommended delay.
/A system delay <120min remains a major goal to achieve for prehospital teams.

Results

→ In hospital mortality

	pPCI <120'	pPCI >120'	p for trend
N (%)	6,645 (86%)	1,111 (14%)	
Mortality, n (%)	122 (1,8%)	46 (4,1%)	<0,0001

Patients characteristics

	pPCI <120'	pPCI >120'	p for trend
Age (years)	62,2 ± 14,1	64,4 ± 13,9	<0,0001
Sex (% F)	23,1	27,8	<0,0001
Any Hx or CAD risk factor (%)	92,4	91,9	0,5997
Median time from onset of Pain to MICU/FMC (min)	85	92	0,0021
Median time from MICU/FMC to pPCI (min)	87	137	<0,0001

Variation of time for pPCI in uncomplicated STEMI <12h

