#7518
Comparison of ST elevation myocardial infarction (STEMI) : mobile intensive care unit (MICU) immediately after emergency call or after first aid assessment

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Background and objective: Any patient with suspicious chest pain has to immediately call the emergency medical dispatch center to any suspicious chest pain. As part of a risk of ST elevation myocardial infarction (STEMI), regulator doctor decided to send a mobile intensive care unit (MICU) immediately after emergency call or after first aid assessment (FAA).

Primary outcome : Compare the characteristics of STEMI between when MICU is immediately triggered after emergency call (EC group) or after first aid assessment (FAA group).

Methods: Data derived from a prospective register including STEMI having primary percutaneous coronary intervention (PCI), managed by 6 medical care intensive units (MCIU), from 2003 to 2014.

Results: 1310 STEMI were included, 67% in EC group. The only significant difference between the 2 populations is when the caller is a healthcare professional (p<0,05). Chest pain – catheterization laboratory (cath-lab) delay and mortality do not show significant difference.

Discussion : The regulator doctor's decision is influenced when the call is made by a health care professional, contrary to history and cardiovascular risk factors.

However it does not increase the risk for patients in terms of management delay and survival

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	EC group	FAA	p	
Effectif	882 (67,4%)	428 (32,7%)	p	
Median age [Q1;Q3]	61 [51;72]	59 [50;71]	0.36	
Man (%)	717 (81,5%)	333 (78%)	0.14	
Call 15/112/911 by patient n (%)	691 (81,1%)	370 (90%)	<0,05	
Call to 15/112/911 by practitioner n (%)	161 (18,9%)	41 (9,9%)		
Personal coronary heart disease	160 (26,4%)	82 (24,9%)	0,63	
Familial coronary heart disease	138 (22,7%)	75 (22,8%)	0,98	
smoking	346 (57%)	205 (62,3%)	0,12	p (Khi2)
Diabetes	101 (16,6%)	68 (20,7%)	0,13	
High blood pressure	269 (44,3%)	133 (40,3%)	0,25	
Dyslipidemia	215 (35,4%)	123 (37,4%)	0,55	
Overweight	181 (29,8%)	93 (28,3%)	0,62	
No antecedent	29 (4,8%)	24 (7,2%)	0,11	
Prehospital mortality	2 (0,2%)	0	0,32	
Hospital mortality	53 (6,4%)	18 (4,4%)	0,15	
Median delay pain to call 15/112/991	58 [22;152]	49 [19;152]	0,25	
Median delay call 15/112/991 to MCIU first contact	16 [11;21]	32 [23;45]	<0,05	p (Wilcoxon)
Median delay MCIU first contact to hospital arrival	54 [45;65]	50 [44;60]	<0,05	
Median delay pain to hospital arrival	135 [96;230]	145 [105;240]	0,15	

Characteristics of STEMI