

divided into 2 groups according to GRACE risk score (group I ≤ 140) and (group II > 140) and the angiographic severity of CAD was described as follows: presence of coronary artery obstruction ($> 70\%$ or $> 50\%$ when affecting left main coronary artery); number of vessel affected, culprit vessel distribution (LAD, LCX, RCA), SYNTAX score and finally amenability for PCI.

Results: 44 patients had GRACE risk score ≤ 140 and 56 pts > 140 . There was no statistically significant difference between the two groups as regard number of vessel affected [single vessel 28 (63.64%) versus 27 (48.21%), More than 1 vessel 16 (36.36%) versus 29 (51.78%) P value 1.025] also the culprit vessel identification, distribution or presence of totally occluded culprit vessel did not show any significant difference [P value 0.333, P value 0.101, P value 0.780 respectively] SYNTAX score showed a statistically significant difference between both group (10.7 ± 4.78 versus 13.3 ± 5.86 , P value 0.017) and GRACE risk score significantly Correlated with syntax score ($r = -0.24$, $p = 0.013$) Finally patients with GRACE risk score ≤ 140 were more amenable for PCI [41 (93.18%) versus 38 (67.85) P value 0.002].

Conclusions: GRACE risk score significantly Correlated with Syntax score and patients with GRACE risk score ≤ 140 were more amenable for PCI.

Acute Myocardial Infarction

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ABSTRACT WITHDRAWN

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Gender Influence on the Immediate and Medium-Term Follow-Up After Primary Percutaneous Coronary Intervention, Independent Risk Factors for Death or Events

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Background: Coronary heart disease is the leading cause of mortality and morbidity. A higher mortality risk for women with acute ST-elevation myocardial infarction has been a common finding in the past, even after acute percutaneous transluminal coronary angioplasty (PTCA). Prior studies have reported worse results after PTCA in women than in men. However, recent data suggest that this difference is less marked.

Objectives: To determine gender-related differences and risk factors for death and major events, both in-hospital and at six-month follow-up, of patients that have been admitted within the first twelve hours of ST-segment elevation acute myocardial infarction (AMI) and primary PTCA in order to set out whether there are gender differences in a real-world contemporary treatment and outcome.

Methods: For two consecutive years, 199 consecutive patients were enrolled in the study, with ST-segment elevation AMI and primary PTCA without cardiogenic shock. The immediate outcome, in-hospital and six-month follow-up were studied. Multivariate Cox analysis were performed to identify independent predictors of death and major events.

Results: Clinical characteristics were similar in both groups, except that women were older than men (67.04 ± 11.53 x 59.70 ± 10.88 , $p < 0.0001$). In-hospital mortality was higher among women ($9.1\% \times 1.5\%$, $p = 0.0171$), as was the incidence of major events ($12.1\% \times 3.0\%$, $p = 0.0026$). The difference in mortality rates remained the same at six months ($12.1\% \times 1.5\%$, $p = 0.0026$). The independent predictors of death in multivariate analysis: were: female gender and age > 80 years old. Independent predictors of major events and/or angina were: multives-sel disease and severe ventricular dysfunction.

Conclusion: After ST-segment elevation AMI and primary PTCA, the independent predictors of mortality throughout the follow-up were female gender and age > 80 years, in both in-hospital and six months follow-up.

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Neutrophil to Lymphocyte Ratio Predicts Short Term Mortality (30 Days) in Patients Undergoing Primary Percutaneous Coronary Intervention Due to Acute ST Segment Elevation Myocardial Infarction

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Background: The elevated neutrophil to lymphocyte (N/L) ratio is believed to be an inflammatory marker that has been shown to be an independent predictor of mortality in patients with CAD, including patients undergoing percutaneous coronary intervention (PCI).

Methods: We analyzed 246 consecutive patients, who underwent primary PCI at our Institution, due to acute STEMI, between October 03, 2007 and June 23, 2012. In 6 patients, only the first PCI was included. Mortality was obtained from the Social Security Mortality Index. Previous studies have suggested N/L ratio > 3.5 as a marker for inflammation. Chi-square test was used to compare categorical variables and the independent T test was used to compare continuous variables. A $p < 0.05$ was considered to be statistically significant. Univariate logistic regression analysis was used to estimate the independent effect in mortality at 30 days. All significant covariates with a $p < 0.25$, were entered in a stepwise multivariate logistic regression analysis to assess the predictive impact of the independent variables in mortality at 30 days. Statistic analysis was performed using SPSS 17. Hospital IRB approved the study.

Results: Within 30 days there were 14 deaths (11.9%) in the group with higher N/L ratio ($p = 0.012$) (Table 1A). Univariate analysis determined age, LV systolic dysfunction, DTB time, hemoglobin, WBC, CPK, creatinine, troponin I and N/L ratio as predictors of mortality at 30 days ($p < 0.25$) (Table 1B). Multivariate logistic regression analysis identified left ventricular systolic dysfunction, WBC and N/L ratio on admission as independent predictors of mortality at 30 days ($p < 0.05$) (Table 1C).

Conclusion: An increase in N/L ratio by 1 unit has a 17.4% (95% CI 5% to 31.3%) increase in odds of dying at 30 days in patients undergoing primary percutaneous coronary intervention because of acute STEMI.

1A-Baseline Characteristics				
Variables	Population (n=240)	N/L < 3.5 (n=122)	N/L ≥ 3.5 (n=118)	P value
Mortality	18 (7.5%)	4 (3.3%)	14 (11.9%)	0.012
Age in years (mean±SD)	57.8 ± 12.8	57.22 ± 11.77	58.47 ± 13.90	0.455
Gender: Men	166 (69.2%)	85 (69.7%)	81 (68.6%)	0.863
Race: African American	135 (56.3%)	68 (55.7%)	67 (56.8%)	0.871
History CAD	59 (24.6%)	29 (23.8%)	30 (25.4%)	0.766
History hypertension	171 (71.3%)	89 (73%)	82 (69.5%)	0.554
History Diabetes Mellitus	92 (38.3%)	42 (34.4%)	50 (42.4%)	0.651
History Hyperlipidemia	146 (60.8%)	74 (60.7%)	72 (61%)	0.954
History smoking	114 (47.5%)	60 (49.2%)	54 (45.8%)	0.596
History LV systolic dysfunction	86 (35.8%)	39 (32%)	47 (39.8%)	0.204
Renal dysfunction (GFR(MDRD) < 60 ml/hr)	47 (19.6%)	21 (17.2%)	26 (22%)	0.347
Door to balloon time (minutes) (mean±SD)	73.35 ± 35.83	72.07 ± 35.22	74.72 ± 36.57	0.568
Hemoglobin (mean±SD)	13.78 ± 1.99	13.90 ± 1.83	13.64 ± 2.16	0.318
WBC (mean±SD)	11.31 ± 5.01	10.58 ± 5.35	12.08 ± 4.52	0.021
CPK (mean±SD)	844.17 ± 2063.53	579.03 ± 1293.68	1123.28 ± 2620.00	0.047
Creatinine (mean±SD)	1.15 ± 0.74*	1.12 ± 0.59	1.18 ± 0.87	0.537
Troponin I (mean±SD)	6.02 ± 20.36 α	2.85 ± 11.77	9.37 ± 26.24	0.016

1B-Univariate logistic regression, predictors of all-cause mortality at 30 days		
Variable	P value	Odds Ratio (95% C.I.)
Age in years (mean±SD)	0.142	1.028(0.991-1.066)
History LV systolic dysfunction	0.026	3.080(1.147-8.269)
Door to balloon time (minutes) (mean±SD)	0.032	1.010(1.001-1.019)
Hemoglobin (mean±SD)	0.048	0.801(0.643-0.998)
WBC (mean±SD)	0.011	1.109(1.024-1.200)
CPK (mean±SD)	0.105	1.000(1.000-1.000)
Creatinine (mean±SD)	0.028	1.584(1.052-2.385)
Troponin I (mean±SD)	0.072	1.014(0.999-1.029)
N/L	0.001	1.196(1.076-1.330)

1C-Multivariate logistic regression, predictors of all-cause mortality at 30 days			
Variable	Odds ratio	95% CI	p value
History LV systolic dysfunction	4.468	1.240 - 16.102	0.022
WBC	1.095	1.014 - 1.182	0.021
N/L ratio	1.174	1.050 - 1.313	0.005

Abbreviations: CAD=coronary artery disease; LV=Left ventricle; GFR (MDRD)=glomerular filtration rate (Modification of Diet in Renal Disease); WBC=with blood cell count; CPK=creatinine phosphokinase; N/L=neutrophil to lymphocyte ratio. * Total population (n) =134, α total population (n) =237.

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Evaluation of Corrected QT and QT Dispersion Changes in Acute ST-Elevation Myocardial Infarction After Primary Percutaneous Coronary Intervention

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Background: QT dispersion (Q_{td}) is defined as the difference between the maximal and the minimal values of the QT through the peripheral and precordial leads. It is considered as an arrhythmogenic indice. Since acute ST-elevation myocardial infarction (STEMI) is associated with arrhythmias and cardiac arrest the aim of this study was to investigate the effect of revascularization on corrected QT interval (QT_c) and Q_{td}.

Methods: We conducted a retrospective study in which patients presenting with acute STEMI who underwent primary percutaneous coronary intervention (PCI) were enrolled. QT_c and Q_{td} were calculated before, 90 minutes after, and 24 hours after the procedure.

Results: Fifty-four patients (49 males, 5 females) with a mean age of 55,2 years were evaluated. The results showed significant reduction in both QT_c (mean 443 ms vs 439 ms ; p < 0,001) and Q_{td} (mean 59 vs 37 ; p < 0,001) before and 24 hours after primary PCI when no significant difference was noticed between the QT_c (443 vs 441 ; p = 0,17) and Q_{td} (59 vs 58 ; p = 0,15) before and 90 minutes after the procedure.

Conclusion: Our Study showed that primary PCI was effective in reducing QT_c and Q_{td} after 24 hours although it showed no effect on these arrhythmogenic indices 90 minutes after successful revascularization with PPCI. These findings suggest that ischemia-induced Q_{td} and prolonged QT_c are important arrhythmogenic parameters responding to successful PPCI and may be used as markers for successful PPCI after 24 hours.

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Primary Angioplasty for Acute Myocardial Infarction: What is the Results and Prognosis Factor? About a Prospective French Registry of 5000 Patients

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Background: In 2012 many reviews showed the results of angioplasty (PCI) in acute myocardial infarction (STEMI). The analysis of the clinical practice is now one of the end point of the real life all around the world.

Methods: We analyzed data collected in a 6 years period in the "Observatoire Régional Breton sur l'Infarctus (ORBI)", a prospective registry of STEMI patients admitted within 24 h of symptom onset to an interventional cardiology centre in Brittany (France). Main data about clinical presentation and management were collected in 8 centers.

Results: Among 5000 patients included in the ORBI registry, 3583 patients (71%) were treated by primary PCI. The procedure was a success (TIMI II or III) in 95% of case. As presented in table 1, some factors were associated as a failure of PCI as diabetes, all the delay from the first symptoms to the PCI (for the contact, the first medical intervention for example). Moreover, thrombo aspiration is a good predictor of success but not for the treatment by Anti Gp 2b3a. Other data regarding this registry are available regarding the treatment on non culprit lesion, role of drug eluting stent, influence of the gender regarding the prognosis.

Conclusions: This French observational registry confirm the major role of information to reduce delay of treatment and his influence on ejection fraction and the mortality.