

Coronary risk factors	Yes	No
Family history premature CAD	4	34
Obesity	0	38
Hyperlipidemia	2	36
Hypertension	0	38
Diabetes	0	38
Smoking	4	34
ECG changes	30	8
II, III, aVF	4	
V4, V5, V6	10	
II, III, aVF, V4, V5, V6	16	
Treadmill test results	Positive 6	Equivocal 32
Localization of MB on Coronary artery		
LAD artery	32	Proximal 2 Mid segment 30
IMA artery	4	Mid 4
Cx artery	2	Mid 2
RCA artery	2	Mid 2

PP-325

The Relationship of the Glycosylated Hemoglobin A1c Levels with the Severity of the Coronary Artery Disease in Non-diabetic Stable Angina Patients

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Objective: We sought to determine the relationship between the severity of the coronary artery disease measured with the Gensini score and the hemoglobin A1c (HbA1c) levels in non-diabetic patients with stable angina pectoris.

Methods: A total of 93 patients undergoing coronary angiography were included in the study. Patients were divided into 3 groups by use of Gensini score (21 patients with normal coronary arteries, 26 patients with mild atherosclerosis and 46 patients with severe atherosclerotic lesions). The associations between severity of coronary artery disease and HbA1c levels were assessed using logistic regression analysis.

Results: The blood glucose readings were observed to be comparable between the groups (p=0.097). While the HbA1c values were higher in severe atherosclerosis group compared with mild atherosclerosis and normal coronary arteries groups (6.7±1.5, 6.0±0.8 and 5.6±0.6%, respectively, p=0.002). The HbA1c values were observed to be correlated with the Gensini score (r=0.374, p<0.001). A cutoff value of 6.0% for HbA1c predicted severe atherosclerosis with a sensitivity and specificity of 54% and 74%, respectively. In the multivariate analysis, high levels of HbA1c were observed to be independent predictors of severe atherosclerosis (OR: 1.975; 95% CI: 1.101-3.542, p=0.022).

Conclusion: Increasing levels of HbA1c in non-diabetic patients with stable angina pectoris are associated with the severe atherosclerosis that may help to predict the increased risk for coronary artery disease.

	Univariate analysis		Multivariate analysis	
	OR (95% CI)	p	OR (95% CI)	p
Gender [male]	0.859 (0.369-2.000)	0.725	0.743 (0.272-2.026)	0.561
Glucose [mg/dl]	1.018 (1.000-1.036)	0.048	0.997 (0.974-1.021)	0.822
Creatinine [mg/dl]	3.736 (0.902-15.478)	0.069	2.807 (0.620-12.710)	0.180
HDL [mg/dl]	0.950 (0.908-0.994)	0.025	0.972 (0.924-1.023)	0.275
HbA1c (%)	2.163 (1.305-3.587)	0.003	1.975 (1.101-3.542)	0.022

PP-326

Can Fragmented QRS on 12 Derivation ECG Be Used As a Predictor of In Hospital Mortality in Patients Admitted with Acute ST Elevated Myocardial Infarction?

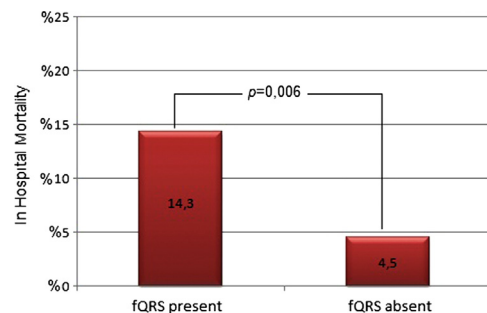
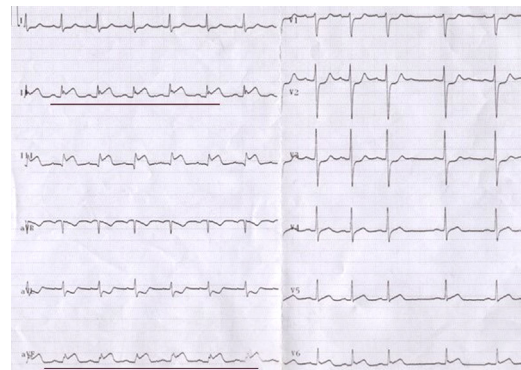
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Objective: Fragmented QRS (fQRS) is defined as QRS notchings resembling conduction delay in at least 2 neighbouring derivations on 12 derivation surface ECG in the absence of bundle branch block pattern. There are several studies that showed this ECG finding to be related with long term mortality of patients with coronary artery disease. As far as we know there's no study evaluating the relationship between fQRS presence and in hospital mortality in acute ST elevated myocardial infarction (STEMI). Aim of our study is to investigate the relationship between fQRS presence and in hospital mortality in patients admitting for the first time with acute STEMI. **Material-Methods:** 248 patients admitted for to Dokuz Eylül University Hospital Cardiology Department for the first time with acute STEMI between 01 January 2009 and 01 July 2011 are included in our study. Patients having ECG findings that can be misdiagnosed as fQRS [incomplete right bundle branch block pattern in V1, pacemaker rhythm, wide QRS complex (QRS >120 ms)] and with CABG history are excluded. All 12 derivation ECG recordings on admission and in 48 hours of admission are investigated for the presence of fQRS. Presence of fQRS is defined as presence of more than one R wave pattern or notching on R or S waves in neighbouring 2 derivations (Figure 1). ECG recordings of patients died from all causes during hospital stay and patients discharged (without mortality) are compared according to presence of fQRS.

Findings: In 91 patients (36.7%) included in our study fQRS was determined. Between groups of patients with fQRS and without fQRS there was no significant difference in MI localization (anterior MI: 38.5% vs 45.2%, p>0.05). In hospital mortality was found to be significantly higher in patients with fQRS than in patients without it. (14.3% vs 4.5%, p=0.006) (Figure 2). Additionally when compared to patients without fQRS, patients with fQRS were found to have lower left ventricular ejection fraction (35±7% vs 47±6%; p<0.001), higher leukocyte counts (12.958±3.07 vs 10.780±3.38; p<0.001), higher maximum troponin levels (62.73±53.49 vs 29.71±16.17; p<0.001) and longer QRS durations (107.86±8.95 ms vs 102.77±9.21 ms; p<0.001) (Table 1).

Result: In patients with acute STEMI fQRS presence on surface ECG is not related with MI localization whereas it is related with increased in hospital mortality. Also supporting this in acute STEMI patients presence of fQRS may help to determine high risk patients with larger infarct size.



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