

## Relation Between Fragmented qrs Complex and Severity of Coronary Artery Disease Evaluated by Syntax Score

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### Background:

CAD is a CVD that is the main reason for mortality in developed and developing nations. CAD is an inflammatory atherosclerotic disorder characterized by stable or unstable angina, sudden cardiac death or myocardial infarction (MI).

### Objective:

To assess the relationship between fQRS complex and severity of CAD in cases undergoing CA.

### Patients and Methods:

This research was conducted on 120 cases that performed coronary catheterization and with developed CAD. All cases were submitted to clinical examination, and Twelve-lead ECG. CA was performed using Philips machine (USA) under local anesthesia using Seldinger technique.

### Results:

Our findings revealed highly significant correlation between prevalence of fQRS and SYNTAX score. There was statistically significant (p-value = 0.033) increased Syntax score in patients Inf. Notched R ( $22.7 \pm 14.4$ ) when compared Syntax score of patients without spikes in Inf. Notched R ( $16.5 \pm 15.1$ ), statistically significant (p-value = 0.008) increased Syntax score in cases with non-Inf.

Notched R ( $22.9 \pm 14.3$ ) when compared Syntax score of patients without non-Inf. Notched R ( $13.8 \pm 14.6$ ) and statistically significant (p-value = 0.041) increased Syntax score in patients with Inf. Notched S ( $21.04 \pm 16.4$ ) when compared with Syntax score of patients without Inf. Notched S ( $17.4 \pm 16.4$ ). There was highly significant difference between prevalence of fQRS on admission and after PCI.

### Conclusion:

fQRS complex is a simply assessed, noninvasive ECG parameter that predict the occurrence of significant CAD. Validation of fQRS as Surveillance tool for CAD in cases with risk factors.

**Keywords:** CAD, cardiovascular disease