جامعة الفيوم كلية الطب





## البحث الأول

## بحث منشور - مشترك - مستخلص من رسالة علمية لم يسبق تقييمه

## عنوان البحث:

## Fragmented QRS complex and ventricular arrhythmias in patients with myocardial infarction

**Introduction:** Fragmented QRS reflects intra-cardiac conduction abnormality and represents a substrate for fatal ventricular arrhythmias.

**Aim**: In our study we aimed to determine whether fragmented wave in electrocardiogram (QRS) (fQRS) is associated with increased incidence of ventricular arrhythmias in patients with coronary artery disease (CAD) or not.

**Methods**: 300 patients with CAD were included. Patients were divided into two groups according to presence or absence of fQRS on admission ECG. Group I (n=51) was defined as fQRS (+ve) and group II (n=249) was defined as a fQRS (-ve). All patients were subjected to full history taking, complete physical examination, and ECG, echocardiography and laboratory investigations.

**Results**: There was higher incidence of fQRS in hypertensive patients (72.5 %). FQRS was found to be associated with increased incidence of ventricular arrhythmias, 51.1 % in group I versus 25% in group II. EF was significantly lower in group I than in group II with P value <0.0001. Fragmented QRS was an independent predictor of mortality with P value <0.0001.

**Conclusion**: FQRS on the resting surface electrocardiogram is a simple, fast and inexpensive modality of noninvasive investigation for evaluation of CAD patients. Patients who have known CAD present with a FQRS have increased rates of ventricular tachyarrhythmias, death risk, and low ejection fraction.

توقيع المتقدم

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