عنوان مقاله:
QT interval and P wave dispersion in slow coronary flow phenomenon

محل انتشار:
مجله آریا آترواسکلروز, دوره 14, شماره 5 (سال: 1397)

تعداد صفحات اصل مقاله: 6

نویسندگان:
Ali Eshraghi - *Associate Professor, Department of Cardiovascular Diseases, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Emadoddin Hoseinjani - *Resident, Tehran Heart Center, Tehran University of Medical Sciences, Tehran, Iran*

Majid Jalalyazdi - *Assistant Professor, Department of Cardiovascular Diseases, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Mohammad Vojdanparast - *Cardiologist, Department of Cardiovascular Diseases, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Reza Jafarzadeh-Esfehani - *PhD Candidate, Medical Genetics Research Center, Basic Medical Sciences Institute, Mashhad University of Medical Sciences, Mashhad, Iran*

خلاصه مقاله:
BACKGROUND: Slow coronary flow (SCF) phenomenon is an angiographic finding which is defined as slow contrast passage through coronary arteries which may predispose patients to serious cardiac complications such as fatal arrhythmias. P-wave and QT-interval dispersion are electrocardiographic findings which are related to atrial fibrillation and ventricular tachyarrhythmias. In the present study, the relation between SCF and presence of P-wave and QT-interval dispersion in electrocardiography has been evaluated.METHODS: ۴۷ patients with normal coronary arteries and SCF and ۴۰ patients with normal coronary artery flow without SCF were enrolled in this case control study. Standard electrocardiogram (ECG) was analyzed for P-wave and QT-interval dispersion. SCF was identified in normal coronary vessels by use of Thrombolysis in Myocardial Infarction (TIMI) frame count (TFC) method (TFC > ۲۷). Corrected TIMI frame count (CTFC) of coronary vessels as well as mean CTFC along with QT-interval and P-wave dispersion were compared between ۲ groups. The study data were analyzed by SPSS software and P value less than ۰.۰۵۰ was considered to be significant.RESULTS: QT-interval [۷۶.۱۷ (۳۵.۲۳) ms versus ۳۹.۲۵ (۱۹.۲۶) ms] and P-wave [۳۹.۷۴ (۱۷.۴۸) ms versus ۱۹.۵۰ (۸.۵۴) ms] dispersion were significantly higher among patients with SCF phenomenon (P < ۰.۰۵۰). In addition, there was a positive significant linear correlation between TFC and P-wave and QT-dispersion (r = ۰.۸۵۷, r = ۰.۸۶۱, respectively, P < ۰.۰۵۰).CONCLUSION: According to the results, increasing TFC among patients with SCF will result in P wave and QT interval dispersion and therefore this finding can be considered as an indicative marker for cardiac events.

کلمات کلیدی:
Coronary Angiography, Electrocardiography, Cardiac Arrhythmias