The prevalence of migraine headaches in patients with myocardial infarction

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Abstract

Background: There are several reports suggesting a relation between migraine headaches and heart diseases. However, there is not enough persuading evidence implying that migraine headache is a potential risk factor for cardiovascular diseases.

Objective: This study was conducted to determine the prevalence of migraine headaches in patients with myocardial infarction, concerning the common vascular etiology of both conditions.

Methods: This is a hospital-based case-control study carried out in the summer and fall of 2001, at Nour, Alzahra, and Chamran hospitals, Isfahan, Iran. The case group consisted of 78 patients with acute MI, and a control group with equal numbers of patients without acute MI who were hospitalized at non-cardiac units, such as orthopedics, infectious diseases and general surgery wards. All patients were evaluated for migraine headaches. The data were analyzed by Chi Square and the multiple logistic regression tests using SPSS software package.

Findings: 37% of patients were women, and 63% were men. The mean age of patients was 57.6±12 years, ranging from 37 to 90 years. 36% of patients with migraine headache were men, and 64% were women. The prevalence of migraine headaches was 16.5% and 5% in the case and control groups, respectively. Mean age of patients was 57.7±10.4 years in the case group, and 57.5±13.4 years in the control group. The onset age of migraine headaches was 25.4±11.4 years in the case group, and 24.9±8.6 years in the control group. Analysis of results demonstrated a meaningful difference between the case and control groups, as regards the relative prevalence of migraine headaches (P<0.05). Multiple logistic regression analysis yielded an odds ratio (OR) of about 3.7.

Conclusion: Given the high prevalence of migraine headaches in patients with acute myocardial infarction in the present study, and conformity of our results with those of previous studies, the strict control of other risk factors for coronary artery atherosclerosis is recommended.

Keywords: Vascular Headache, Migraine, Heart Block