

The Effect of Acupressure on Intestinal Function in Patients with Acute Myocardial Infarction under Primary Percutaneous Coronary Intervention

Mahsa Kamali

Mazandaran University of Medical Sciences, Iran

Masoumeh Bagheri-Nesami

Mazandaran University of Medical Sciences, Iran and World Federation of Acupuncture-Moxibustion Societies (Wfas), China

Ali Ghaemian

Mahmood Moosazadeh

Mazandaran University of Medical Sciences, Iran

Nadali Esmaeili-Ahangarkelai

World Federation of Acupuncture-Moxibustion Societies (Wfas), China

Fahimeh Ghasemi

Sahar Haghghat

Mazandaran University of Medical Sciences, Iran

Background and the objectives: Acute Myocardial Infarction patients are at risk for constipation, following the admission to intensive care units due to inactivity, use of drugs such as calcium channel blockers, diuretics and narcotics. So, the purpose of the study was to determine the effect of acupressure on intestinal function in patients with Acute Myocardial Infarction under Primary Percutaneous Coronary Intervention. Methods: The present randomized clinical trial was conducted in heart center affiliated to Mazandaran University of Medical Sciences, Sari, Iran. 90 Acute Myocardial Infarction patients (30 patients in each group) were random allocated based on inclusion criteria. The data collection tools used included a socio-demographic questionnaire, Rome IV scale, Bristol stool scale and patient control checklist. Intervention was carried out among the Acute Myocardial Infarction patients two times a day (10 am and 6pm) for three sequences days. In the intervention group, the intervention was conducted on the acupressure points SJ6, LI4, ST25 and SP6 in both parts of body symmetrically, so that 1 minute vertical pressure with the thumb, then 5 seconds stop to rest and after that 1 minute rotational massage had been applied. Each session lasted for 9 min approximately. In the sham group, the intervention was carried out with 1.5 cm distance from the above-mentioned acupressure points. All three groups received 30 cc magnesium hydroxide a day. Results: The mean (SD) of the participants' age in the intervention, sham and control groups were 49.90 (10.26), 51.47 (10.19) and 52.53 (10.84) years, respectively. On the first and second days of the study, all of the Acute Myocardial Infarction patients had no defecation. In the intervention group 93.3% and 96.7% had normal defecation on the third and fourth days of the study, respectively. In the sham group 46.7% participants had normal defecation on

the both third and fourth of the study. In the control group 50.0% and 63.3% had normal defecation on the third and fourth days of the study, respectively. The results of chi-square test revealed significant different among three groups (P-value<0.001). Conclusion: The results of present study showed normal defecation based on Bristol scale was significant different among three groups, so that the frequency of normal defecation in the interventional group was higher than sham and control groups. So, an acupressure as non-invasive and safe procedure can be used in clinical setting as nursing intervention.

Keywords: *Acupressure, Acute Myocardial Infarction, Complementary Medicine, Constipation, Intestine Function*