ABSTRACT

The effect of citrus aurantium aroma on hemodynamic parameters of individuals with acute coronary syndrome in ccu.

Introduction: Patients with acute coronary syndrome admitted to the cardiac intensive care unit are subject to hemodynamic changes caused by anxiety and stress due to the multiple sources of stress in the department, which delay the complications of the illness and delay the patient's recovery. The aim of this study was to evaluate the effect of citrus aurantium on hemodynamic parameters of patients with acute coronary syndrome in the cardiothoracic department.

Methods: This is a randomized, one-blind clinical trial that was conducted on patients with acute coronary syndrome admitted to the Cardiac Care Unit of Allameh Behnollah Gonabadi Hospital in 2017. 80 patients were randomly assigned to two groups of test and control. In the test group, the essential oil of citrus aurantium was 10% and in the control group, distilled water was used. On the second and third day after admission, before and after 5, 30, and 60 minutes after intervention, hemodynamic parameters included systolic blood pressure, diastolic blood pressure, temperature, respiratory rate, heart rate, pulse pressure, median and arterial pressure, and Arterial oxygen saturation was measured. Data analysis was performed using descriptive and inferential statistics such as mean, standard deviation, independent t-test, Chi-square, Fisher exact and Mann-Whitney test with SPSS software 16 and significant level less than Became 0.05.

Results: The samples were 40 patients in each group, which did not have a significant difference in the underlying characteristics (p> 0.05). Based on the results, the indexes of arterial oxygen saturation on the second day (p = 0.03), the temperature on the first day (p = 0.027), respiration on the first day (p <0.001), systolic blood pressure And diastolic blood pressure (p <0.001) on the second day (p <0.001) and pulse pressure and mean arterial pressure in both days (p <0.001). There was a significant difference between the two groups in the test group compared to the control group they had. However, the indexes of arterial blood saturation on the first day (p = 0.66) and the temperature on the second day (p = 0.66), respiration on the second day (p = 0.13), heart rate on the first day (p =0.12 ) On the second day (p = 0.18), systolic blood pressure was not significantly different between the two groups on day one (p = 0.66) and diastolic blood pressure on the first day (p = 0.66).

Conclusion: The aroma of citrus aurantium with positive effect on systolic and diastolic blood pressure, pulse pressure and medial pressure in patients with acute coronary syndrome can be used as an uncomplicated and inexpensive method as a complementary therapy.

Keywords: Aromatherapy, Citrus Aurantium , Hemodynamic Parameters, Acute Coronary Syndrome, CCU