The Effect of Using Olive Oil and Fish Oil Prophylactic Dressings on Heel Pressure Injury Development in Critically Ill Patients

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Introduction and Aim: Prevention of pressure injuries in patients hospitalized in intensive care units is significantly important. Therefore, in the present study, the effect of using olive oil and fish oil prophylactic dressings on the development of heel pressure injuries was investigated.

Methods: The present study was a clinical trial conducted in the intensive care unit of Shahid Beheshti Hospital, in Yasuj. Fifty patients, who were at moderate to high risk of pressure injuries development, were randomly divided into two groups based on the mean score of the Braden scale. In one group, patients’ heels were dressed using olive oil prophylactic dressing, and in the other group, patients’ heels were dressed using fish oil prophylactic dressing. The dressings were changed 3 times a day. Collected data were then analyzed using SPSS v16.

Results: No significant difference was determined in demographic variables among the two groups (p<0.05). In terms of the development of heel pressure injuries, none of the patients in the olive oil and fish oil groups had pressure injuries.

Conclusion: There were no statistically significant differences in either treatment group related to heel pressure injuries outcomes during the 7 days observed in the study. Additionally, both dressings had the same effects. Further studies are recommended in this regard.

Keywords: preventive dressings, pressure injuries, nursing care, critical patients, olive oil, fish oil

Introduction
Despite the significant development in the prevention of pressure injuries, many hospitalized patients, especially those hospitalized in intensive care units (ICUs), develop some degrees of pressure injuries.1,2 These ulcers can be associated with various issues for the patient and the healthcare system including an increase in the costs, whether during hospitalization or after hospital discharge, an increase in the length of stay in hospital, and an increase in the need for readmission.3 In addition, the development of pressure injuries in a patient can lead to psychological problems, lower self-esteem, and lower quality of life.4,5 Excessive pressure on the capillaries of the skin and their blockage are the main causes of pressure injuries development.6 However, other factors, including immobility, nutritional deficiencies, old age, the frequent use of medical equipment,7 urinary and/or bowel incontinence, loss of consciousness, sedation, and some underlying diseases increase the chance of patients developing pressure injuries.8–13