EVALUATING DRESSINGS FOR THE PREVENTION OF FACIAL PRESSURE ULCERS CAUSED BY THE APPLICATION OF NONINVASIVE POSITIVE PRESSURE VENTILATOR PATIENTS: A PILOT STUDY

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Aim: The purpose of the study was to compare the efficacy of dressings for preventing facial pressure ulcer of using noninvasive positive pressure ventilator patients.

Methods: A quasi-experimental study design was conducted in the pulmonary ward of a medical center in Taiwan. Participants were randomized into three groups: control group (regular nursing care), hydrocolloid dressing*, and soft silicone foam dressing**. The primary outcome was the number of facial pressure ulcers in each group. Secondary measures included time to development of facial pressure ulcers.

Results: A total of 30 participants were randomized. The differences between the three groups in number of facial pressure ulcers was statistically significant (p<.003). Participants in the soft silicone foam dressing group had the lowest incidence of pressure ulcers (0 / 13, 0%), compared to the control group (2 / 11, 18.18%) and hydrocolloid dressing group (4 / 6, 66.67%). Time-to-development of pressure ulcers was significantly shorter in the hydrocolloid dressing group (6.67 days versus 11.25 days in control group, p<.02).

Conclusion: The results of this study indicate that soft silicone foam dressing is associated with a low rate of pressure ulcers in patients with noninvasive positive pressure ventilator. However, further research that involves a larger sample size and multiple tertiary medical centers may be needed to confirm this paper’s findings.

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