Use of wound dressings to enhance prevention of pressure ulcers caused by medical devices ressure ulcers in trauma and critically ill patients: the border trial

Citation: International Wound Journal, 01 June 2015, vol./is. 12(3)(322-327), 17424801
Author(s): Black, Joyce, Alves, Paulo, Brindle, Christopher Tod, Dealey, Carol, Santamaria, Nick, Call, Evan, Clark, Michael
Abstract: Medical device related pressure ulcers (MDR PUs) are defined as pressure injuries associated with the use of devices applied for diagnostic or therapeutic purposes wherein the PU that develops has the same configuration as the device. Many institutions have reduced the incidence of traditional PUs (sacral, buttock and heel) and therefore the significance of MDR PU has become more apparent. The highest risk of MDR PU has been reported to be patients with impaired sensory perception, such as neuropathy, and an impaired ability for the patient to communicate discomfort, for example, oral intubation, language barriers, unconsciousness or non-verbal state. Patients in critical care units typify the high-risk patient and they often require more devices for monitoring and therapeutic purposes. An expert panel met to review the evidence of the prevention of MDR PUs and arrived at these conclusions: (i) consider applying dressings that demonstrate performance and effectiveness in reducing the number of pressure injuries in patients with medical devices, (ii) in addition to dressings applied beneath medical devices, continue to lift and/or move the medical device to examine the skin beneath it and reposition for pressure relief and (iii) when simple repositioning does not relieve pressure, it is important not to create more pressure by placing dressings beneath tight devices.

A randomised controlled trial of the effectiveness of soft silicone multi-layered foam dressings in the prevention of sacral and heel pressure ulcers in trauma and critically ill patients: the border trial0

Comments

Citation: International Wound Journal, 01 June 2015, vol./is. 12(3)(302-308), 17424801
Author(s): Santamaria, Nick, Gerdzt, Marie, Sage, Sarah, McCann, Jane, Freeman, Amy, Vassiliou, Theresa, De Vincentis, Stephanie, Ng, Ai Wei, Manias, Elizabeth, Liu, Wei, Knott, Jonathan
Abstract: The prevention of hospital acquired pressure ulcers in critically ill patients remains a significant clinical challenge. The aim of this trial was to investigate the effectiveness of multi-layered soft silicone foam dressings in preventing intensive care unit (ICU) pressure ulcers when applied in the emergency department to 440 trauma and critically ill patients. Intervention group patients (n = 219) had Mepilex<sup>®</sup> Heel dressings applied in the emergency department and maintained throughout their ICU stay. Results revealed that there were significantly fewer patients with pressure ulcers in the intervention group compared to the control group (5 versus 20, P = 0.001). This represented a 10% difference in incidence between the groups (3-1% versus 13-1%) and a number needed to treat of ten patients to prevent one pressure ulcer. Overall there were fewer sacral (2 versus 8, P = 0.05) and heel pressure ulcers (5 versus 19, P = 0.002) and pressure injuries overall (7 versus 27, P = 0.002) in interventions than in controls. The time to injury survival analysis indicated that intervention group patients had a hazard ratio of 0-19 (P = 0.002) compared to control group patients. We conclude that multi-layered soft silicone foam dressings are effective in preventing pressure ulcers in critically ill patients when applied in the emergency department prior to ICU transfer.

Using transparent polyurethane film and hydrocolloid dressings to prevent pressure ulcers

Citation: Journal of wound care, Jun 2015, vol. 24, no. 6, p. 268-275, 0969-0700 (June 2015)
Abstract: To compare the performance and effectiveness of a hydrocolloid dressing (HD) and a transparent polyurethane film (PF) in preventing pressure ulcer (PU) development. The study was conducted in the intensive care unit, coronary care unit and medical clinic of the Holy House of Mercy of Passos, Brazil. Data were collected 48 hours after admission and during hospitalisation. The Braden scale was used for PU risk assessment. Consecutive eligible patients without PUs were randomly assigned by lottery to the two groups, either the HD or PF group. Of the 160 eligible patients, significant between-group differences were found in the mean total number of dressing changes (HD, 6.09 ± 1.659 changes; PF, 5.59 ± 2.036 changes; p=0.010), and mean number of dressing changes in the sacral region (HD, 2.50 ± 0.871; PF, 2.05 ± 0.825; p=0.001), with the PF group requiring significantly fewer changes than the HD group. The most common reasons for changing dressings in both groups were moisture (PF 51.1%; HD 47.9%) and shear (HD 43%; PF 38.9%), with a significant difference in shear between groups. The incidence of PUs was significantly lower (p=0.038) in the PF group (8.7%) compared with that in the HD group (15%). The results suggest that the transparent polyurethane film had a better performance and was more effective than the hydrocolloid dressing in preventing PU development.

Source: Medline
Fine-tuning the Munro Scale for pressure ulcers

Citation: OR Manager, 01 June 2015, vol./is. /(1-1), 87568047
Author(s): Mathias, Judith M.
Publication Type: journal article
Source: CINAHL
Full Text: Available from EBSCOhost in OR manager