

Incorporating a Body Wash & Skin Protectant Into Skin Care Protocols Reduces Skin Breakdown in Two Nursing Homes

For the full article,
see Hunter et al,
Journal of WOCN
Vol. 30, Number 5,
Sept. 2003
pages 250-258

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This study was supported by Summit Industries, Inc., Marietta, Georgia.

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Researchers at the University of North Dakota College of Nursing found that incorporating Lantiseptic All Body Wash® (ABW) and Skin Protectant® (SP) (Summit Industries, Inc., Marietta, GA) into skin care protocols significantly reduced the occurrence of skin breakdown among residents in two skilled nursing homes. Maintaining skin integrity in older adults is a significant concern and a challenge for all care providers. With age, the epidermal layer of the skin, composed primarily of keratinocytes and stratum corneum, becomes dry and fragile, with less turgor and elasticity. These changes predispose the skin to irritation and breakdown. The epidermal layer is believed to decrease by half by age 80, so efforts to maintain hydration of the skin would be most prudent.¹ According to Maklebust and Sieggreen,² barrier ointments containing lanolin and petrolatum are more effective and provide a longer lasting protection.

In this quasi-experimental study, the occurrence of skin breakdown during usual agency skin care and nursing protocols was documented for three months. Following the pre-intervention time frame, an educational inservice was provided to licensed and unlicensed nursing care staff to explain the study, review the skin care protocols, and educate the staff on the skin protectant and body wash. Two nurses from both agencies agreed to serve as research assistants and were trained by the authors in data collection. Nursing care plans for dry and/or cracked skin, for perineal dermatitis, and for pressure ulcers were introduced into the skin care protocols. During the three-month post-intervention time period, agency nurse administrators encouraged the use of the body

wash and skin protectant. The skin protectant contains 50% lanolin along with beeswax and petrolatum additives, resulting in a fine grain emulsion. It is a non-prescription moisture barrier, laboratory tested and approved by the federal government. The skin protectant is non-irritating, non-sensitizing, non-toxic, and non-cytotoxic. The study body wash has been formulated to clean and deodorize without a need to rinse, and is non-irritating and pH-balanced, and has a low sudsing formula. The body wash was used both as a hair wash and as a cleanser; the skin protectant was used on Stage I and II pressure ulcers, as a moisture barrier, for skin injuries due to incontinence, and for red and/or dry or cracked skin including skin tears. The SP was to be applied at least every eight hours when used, and after every cleansing when incontinent.

Approximately 70% of the 136 residents in the study were female; and 56 residents were in both the pre- and post-intervention samples. The mean age of residents in Agency A was 83 years and 81 years in Agency B. In both agencies, the occurrence of skin breakdowns decreased from pre- (n=74) to post-intervention (n=39) post-intervention, which was a statistically significant decrease for Agency B ($X^2=7.17$, $p=.007$). Close to half of the breakdowns were skin tears, while approximately 20% were perineal dermatitis and 22% were other types of skin breakdown. Overall, the incidence of skin breakdown decreased from 31.6% pre-intervention to 21.3% post-intervention. The pressure ulcer incidence (Stage I-II pressure ulcers only) decreased throughout the study. This decrease was statistically significant for the total sample ($X^2=3.64$, $p=.000$, 19% to 8.1%), and approached significance for Agency A ($X^2=3.69$, $p=.055$, 18.9% to 5.6%). Of importance is the decrease in the occurrence of perineal dermatitis by nearly half, from 15 in the pre-intervention to 8 in the post-intervention time period. Also of

importance is that the number of skin tears dropped from 32 pre- to 17 post-intervention. This merits further study. The nursing staff were queried as to their evaluation of the study products and felt both products were effective on all the skin conditions documented during the study. While the nursing staff felt it was easy to apply, they did note that warming the skin protectant facilitated the application.

Incorporating a lanolin and petrolatum based skin protectant and lanolin based skin cleanser into routine skin care protocols in nursing home residents contributed to a significant decrease in skin breakdowns and in pressure ulcers. The study design was advantageous in that it incorporated the real-life, everyday care providers for implementing the skin care protocols. This emulated actual clinical practice. Decreasing the incidence of skin breakdown, including pressure ulcers, in long-term care can result in significant savings in terms of dollars for care and resident discomfort and/or suffering.

References

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