

The Effects of Hydrocolloid Dressing and Gentian Violet on Radiation Induced Moist Desquamation Wound Healing.

S.S. Mak, A. Molassiotis, W.Wan, I.Lee, E Chan. Cancer Nursing, Vol. 23, No. 3, 2000.

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Abstract:

The aim of the study was to compare the effect of a gentian violet topical application with that of a moist dressing (Hydrocolloid) on the rate and efficacy of radiation induced moist desquamation wound healing, and the patient's satisfaction level with each method. The prospective randomized clinical trial used a stratified sampling design. A sample of 39 patients with 60 wounds had their wounds assessed on alternate days in terms of several wound healing parameters including wound size, wound pain, incidence of infection, and time required for healing. Patient satisfaction with each treatment was evaluated at the completion of the study. Gentian Violet significantly reduced wound size, and reduced wound pain. However, this treatment received significantly lower ratings for dressing comfort, and dressing aesthetic acceptance. Nevertheless, the time required for wound healing was not statistically different in the two groups. These findings suggest that the lower score of dressing satisfaction level in the gentian violet group may result from the skin discoloration, and drying effects of the treatment, which renders patients unable to move or stretch their skin. Although the aim is to have complete wound healing, this may not be realistic for many lesions such as radiation induced moist desquamation wounds. The best evidence on which to make decisions about individual care can now be based on the patient's own perception of quality.

CommentsStrengths:

A study utilizing Hydrocolloid products on other than pressure ulcers
Easy to follow study, well organized, and well described, outcomes well identified.
Identified weaknesses, and areas for further investigation

Weaknesses:

Identified by the authors:

- Small sample size 39 patients, some with bilateral wounds, total of 60 wounds
- 80% of the sample were wounds to head and neck areas , remainder were axilla, chest, and perineal
- Few studies related to radiation burns to compare to
- Admitted bias by the authors: Support and information service provided by the nurses during the longer hydrocolloid dressing change routine provided a close and comforting relationship to be formed, the patients felt they were well informed, and were able to ask questions, and received a high quality service. Therefore they tended to rate the hydrocolloid dressing at a higher satisfaction level, even if the wound did not heal significantly faster, experienced higher wound pain, increase in wound size, more wound exudation.
- The scale for assessment was unsatisfactory: pain at rest, wound manipulation or at exercise were not differentiated; patients had difficulty using the offered scale. The authors felt it would be important to differentiate between pain at the wound site, and pain of dressing removal (adhesion of dressing to hair)
- The major reason for dressing changes was the melted gel oozing from under the dressing.(The experimental product

"thin" has little absorbent properties, perhaps regular thickness could have been tried)

- (A table indicating pt.satisfaction, comfort, and aesthetics would make the info. easier to follow)
- A study utilizing larger sample, and other occlusive, and semi occlusive dressings should be tried
- The study relied on self reports from the gentian violet group: that they were adhering to the study protocol, when at home, which may limit the generalizability of the study.

Relevance to Palliative Care:

Useful protocol for patients suffering from moist R.T. induced burns, hydrocolloids not usually used for such

Gentian violet is cost effective, but messy to work with or remove from skin or clothing. Would it be more acceptable in the home setting on less observable wounds? Hydrocolloids are expensive, & hard on skin if removed every 2 days.

Leaving this product on longer caused more drainage oozing from under the dressing. Drainage control may have been better with thicker hydrocolloid product.