SELECTION OF WOUND DRESSINGS: ASSESSMENT OF NON-CLINICAL VARIABLES CAN BE AS VITAL AS CLINICAL VARIABLE EXAMINATION

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ABSTRACT

Clinicians with wound care expertise are frequently introduced to new technology and products designed to provide the ideal healing environment. Physiologic factors have been identified as important include moisture, protection, insulation, oxygen permeability and facilitation of cellular regeneration. Prior to initiation of a trial period for product performance and clinical outcomes, one usually examines factors such as cost benefit ratios and clinical performance recorded in the literature. With visualization of the pictures and handouts, the participant will be able to identify specific cases where the correct dressing was thought to have been selected for a particular wound according to institutional protocols, however extraneous variables such as improper dressing use and staff inconsistency altered the expected clinical outcomes.

OBJECTIVES

The viewer of this poster will be able to:

* Identify two non-clinical considerations helpful when selecting wound dressings.

* Individualize method of dressing selection at their institution according to assessment findings.

INTRODUCTION

A few years ago, the majority of wound care consults received by this ET Nurse were for recommendations for treatment on patients with Stage III or Stage IV pressure ulcers, commonly referred to by staff as "terrible decubiti". Since the intense educational efforts by ET Nurses and the introduction of the AHCPR Clinical Practice Guidelines, earlier identification of high risk patients is occurring, and ET Nurse consults are received for far fewer major wounds. Consults are now placed for both prevention assistance as well as treatment recommendations for Stage I or Stage II ulcers.

The typical wound care consult of today centers around the patient who has been identified as having high risk factors for skin breakdown and preventive efforts thus far have failed. A majority of these patients have had nursing interventions consistent with the Patient Care Protocol for Impaired Skin Integrity, however, something failed. Upon assessment, and review of events with the primary nurse, it is usually established that a hydrocolloid or transparent dressing had been instituted by someone, and either removed inappropriately, or not communicated consistently to other staff, thus extending the epidermal destruction.

A. Improper Dressing Use

* At an acute tertiary care facility licensed for 464 beds with a professional staff of over 750 licensed personnel, less than 10% of them attended new products inservices offered.

* Attempts to Rectify Problem:
  - Skin care protocol now given during orientation
  - Unit-based product inservices are offered to access increased numbers of staff
  - Announcements now written in Nursing Services Newsletter
  - Institutional protocol laminated and hung in each unit's medication room for easy reference
  - 3x5 cards customized to institution protocol to educate and achieve consistency
  - A unit representative chosen from each unit to serve as liaison to staff

B. Teaching Facility in Major Metropolitan Area with Over 25 Specialty Services Available

* Potentially, a patient could see up to 40 people during a short hospital stay, each desiring to evaluate or assess condition of wound.

* Attempts to Rectify Problem:
  - Institution now moving towards primary nursing
  - Staff being taught to label dressings
  - Brainstorming sessions held regularly with unit representatives on issues of consistency

C. Dressing Availability

* New technology is introduced
* Samples and literature are provided
* User discovers either a large quantity must be ordered, or it takes two weeks to obtain product. Sometimes products are locale dependent

D. Other Factors to Consider as Dressings are Selected:

* Products must be user friendly... be familiar with your staff's knowledge base and experience levels
  - Generally, the simpler... the better for the patient, the nurse and the caregiver

* The practice setting in which you are evaluating products
  - Home health visits are less frequent and often require dressings with longer wear time
  - Long term care facilities: Will the patient disturb the dressing inadvertently?

* Changes in Patient Condition
  - If the wound is reassessed inadequately, dressing could be ineffective
  - Harmful effects can occur
  - Dressing performance can be altered significantly

Since 1992, we have been stocking Elasto-Gel™ (Southwest Technologies, Inc.) Hydrogel Dressing as our choice hydrogel and have noticed an evolution of the use of much fewer adhesive dressings within our patient population. Hydrogels are water based polymer gels which provide for a moist wound bed, fluid absorption, and moisture-vapor permeability. Currently there are less than ten Hydrogel sheet dressings on the market, yet at the time of this publication, there are probably many more in the research and development stages.

Our institutions' choice of Elasto-Gel™ has been for a variety of clinical and non-clinical factors:

* The thickness of the pad itself provides a 1/8" cushion to the already fragile wound bed and surrounding tissues

* The cushioned covering affords dramatic differences in patient comfort due to the fact that superficial nerve endings previously exposed to air and environmental irritants are now protected

* We were able to successfully apply topical medications under the Elasto-Gel™ without interference in therapeutic results (ie: anti-fungal creams)

* Elasto-Gel™ did not dry out through evaporation of the dressing's water content as did others evaluated. Elasto-Gel™ has a less percentage of water, therefore evaporation is much slower

* The dressing did not deteriorate into the wound bed or leave liquefaction on the wound bed as it absorbed wound fluid

* The non adhesive nature of the dressing allows all consultants to evaluate the wound and surrounding skin without having extension through adhesive removal

* The dressing is manufacture, and is readily available in whatever quantities or sizes we may have need for

CONCLUSION

Two years after the initiation of the unit based skin care program within the institution, we are finding that Nurses are making improved assessments of the patient with a pressure ulcer, and the correct dressing is being selected for the patient more frequently. Our supplies have evolved from using a majority of Hydrocolloid dressings to use of a majority of Hydrogel dressings. The Hydrogel we have selected is Elasto-Gel™, manufactured by Southwest Technologies, Inc. These dressings have a non-adhesive property which is tolerated by our patient population more so than adhesive dressings. They also have a cushioning effect on the wound bed and surrounding skin, unlike other Hydrogels. Our Stage II pressure sores which previously would extend in size from improper application or removal technique of the Hydrocolloid, now show rapid resolution with use of the Hydrogel. Finally, the patient satisfaction with use of Elasto-Gel™ has been enhanced as evidenced by proof positive statements such as "...I have suffered with that sore spot on my bottom for about a week! I'm sure glad you came by and put that new dressing on me. Please don't run out of the dressing before I go home!" (JF, 72 year old black male admitted with peripheral vascular disease, had BKA; developed Stage II pressure sore on coccyx, initially had Hydrocolloid applied by an LPN on evening shift. ET Consult received 7 days later, when area had extended from 1-3cm, and became tender)