PolyMem®

CASE STUDY

PolyMem Dressings Bring Brisk Healing To Bilateral Pressure Ulcers

BEFORE

AFTER

CASE STUDY

PolyMem Dressings Bring Brisk Healing To Bilateral Pressure Ulcers

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PROBLEM

A 74-year-old veteran with a Braden score of 12 due to multiple sclerosis suffered from friction related Stage II pressure ulcers on both ischial areas over scar tissue from burns due to a motor vehicle accident several years previous. The patient has a urinary catheter and requires assistance from family members for all activities of daily living. He tends to feel cold, so he keeps himself covered with blankets and warm clothing. His consequent chronically diaphoretic state makes both skin care and keeping dressings in place problematic.

When the wound nurse was consulted, the left ischial wound was 1.7 cm x 1.2 cm x 0.2 cm and the right ischial wound was 5.8 cm x 4.8 cm x 0.4 cm. The periwound skin was macerated, feverish and erythematous. The exudate was serous but the quantity was large. The patient was started on two weeks of oral ciprofloxacin and co-trimoxazole based upon positive cultures for pseudomonas, Klebsiella pneumonia, Staph aureus and E. coli. A low air loss overlay was ordered and the necessity of repositioning at least every two hours was reinforced.

RATIONALE

PolyMem dressings are extremely absorbent, because within the foam base they contain a superabsorbent starch which locks exudate in the dressing in the form of a gel.

A built-in wound cleanser directly facilitates autolytic debridement by loosening the bonds between the slough and the wound bed. Hydrophilic ingredients in the dressings draw and concentrate natural healing substances from the body into the wound bed to promote rapid healing. Liquified slough is pulled into the dressing as well, often eliminating the need for wound bed cleansing during dressing changes. PolyMem dressings inhibit the nociceptors at the application site, which can dramatically decrease pain and inflammation.

METHODOLOGY

After an initial saline flush, PolyMem dressings were cut to size and applied to the wound sites. Dressings were held in place with hypoallergenic tape. The dressings were changed two-to-three times per week, when saturated. Since no routine wound cleansing was needed, rolls of PolyMem dressings were left in the home and the daughter performed many of the dressing changes. The wound care nurse assessed and dressed the wound weekly. Home Health visited monthly.

RESULTS

Significant improvement was seen at the first dressing change and the wound filled in very rapidly. After only three weeks of treatment the left ischial wound was closed; the right wound closed in a total of only six weeks.

Poverty and lack of adherence compound this patient's problems. Two weeks after closure, the patient was up in a chair all day without an appropriate support surface or repositioning (he had not yet had pressure mapping done). Both wounds reopened superficially (right: 1.5 cm x 1.0 cm x <0.1 cm; left: 6.0 cm x 6.0 cm x <0.1 cm).

The patient was placed on oral antibiotics for pseudomonas and enterococcus. Treatment with PolyMem dressings was resumed. The right wound closed again in two weeks. The left wound quickly divided into three very small wounds, all of which closed steadily. Since this area of burn scars is extremely vulnerable to pressure ulcer

PURPOSE/OBJECTIVES

1. Take note of the rapid wound closure in this medically fragile patient using PolyMem dressings, despite his failure to consistently offload.
2. Discuss the advantages of PolyMem having a built-in wound cleanser, which minimizes disruption to the wound bed tissue and maintains desirable wound temperature.
3. Note how the quick healing with PolyMem, combined with the ease of use that permitted family members to perform dressing changes, dramatically decreased costs and provided comfort and convenience to the patient.

JUNE 27
1.7 cm x 1.2 cm x 0.2 cm (L)
5.8 cm x 4.8 cm x 0.4 cm (R)
Began PolyMem dressings.

JULY 3
1.3 cm x 0.7 cm x 0.1 cm (L)
5.7 cm x 2.2 cm x 0.2 cm (R)
Nice edges; no wound cleansing needed.

JULY 18
Closed (L).
2.8 cm x 1.0 cm x 0.1 cm (R)
Closed Aug 9 (R)
Closed rapidly despite poor offloading.

development, PolyMem dressings were continued for one week after complete wound closure to strengthen the scars. Four months later, the area had not reopened.

CONCLUSION

PolyMem dressings promoted very brisk wound closure despite underlying scar tissue in this medically fragile man. Since PolyMem dressings have an effect on intact skin, patients with fragile areas of scar may benefit from their use even after the skin is closed, in order to strengthen the scar. This patient's wounds recurred, but closed quickly again. The scars remained intact after PolyMem dressings were used on them for an extra week.

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SEPT 12
0.6 cm x 0.6 cm x 0.1 cm (L)
3.2 cm x 2.2 cm x 0.1 cm (R)
Reopened Aug 30; closing very quickly.

OCT 4
Closed again (L)
1.0 cm x 0.5 cm,
1.5 cm x 1.0 cm,
0.3 cm x 0.3 cm all very shallow (<0.1 cm) (R).

NOV 1
Closed (L)
1.3 cm x 1.4 cm x 0.1 cm and
0.3 cm x 0.5 cm x 0.1 cm (R)
Scar strengthening.

NOV 28
All wounds closed.
PolyMem dressings applied for an additional week to strengthen the scar.

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BIBLIOGRAPHY:

1. Kim Y, Lee S, Hong S, Lee H, Kim E. The effects of polymem on the wound healing. J Korean Soc Plast Reconstr Surg 1999;109:1165-1172.

2. Bergstrom N, Horn SD, Smout RJ, et al. The national pressure ulcer long-term care study: outcomes of pressure ulcer treatments in long-term care. J Am Geriatr Soc. 2005;53(10): 1721-1729.

3. Cutting KF, White RJ. Criteria for identifying wound infection-revisited. Ostomy Wound Management. 2005;51(1)28-34.

4. Hess CT. Clinical Guide: Skin and Wound Care 6th Ed. Lippincott Williams & Wilkins. Ambler, PA. 2008; 228-231,234-5,343-350.

5. Yastrub DJ. Relationship between type of treatment and degree of wound healing among institutionalized geriatric patients with stage II pressure ulcers. Care Manag J. 2004 Winter;5(4):13-8.

6. Beitz AJ, Newman A, Kahn AR, Ruggles T, Eikmeier L. A polymeric membrane dressing with antinociceptive properties: analysis with a rodent model of stab wound secondary hyperalgesia. J Pain. 2004 Feb;5(1):38-47.

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* This version has been modified from the original; it reflects PolyMem branding.

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