A Multifunctional Dressing for Effective Wound Care in Home Health

ROPER ST. FRANCIS HEALTHCARE HOME CARE



Judith [Judy] Burbage BSN, RN, CWON. Roper St. Francis Home Health, 8536 Palmetto Commerce Parkway, Suite 207, Ladson South Carolina, 29456

Introduction

Four challenging wounds in Home Health (HH). Patient 1: 77 y.o. female, ambulatory type 2 diabetes; left heel Deep Tissue Pressure Injury (DTPI), present 38 days. Intermittent wound pain with dressing changes. Prior care: film dressing changed weekly, foam dressing for a week. Patient 2: 64 y.o. male, history of stroke, non-verbal, type 2 diabetes, contractures, bed-bound (cared for by mother/other family) with left heel DTPI. Prior care: Daily Povidone Iodine, gauze for 14 days. Pressure relief boots and off-loading. Patient 3: 41 y.o. male, Sweet Syndrome (rare inflammatory skin condition that causes fever, rash, and sores on the skin), acute myeloblastic leukemia, right leg wound, chemotherapy stopped when wound care was started, wound present 28 days. Wound 25% necrotic tissue and 75% granulation. Prior care: Sharp debridement, Leptospermum honey dressing 2-3x per week followed by plain foam 3x per week. Patient 4: 89 y.o. female, arthritis, atrial fibrillation, congestive heart failure, taking Apixaban (anticoagulant). The patient slipped into her bathroom and hit her head on the floor. She had a left orbital fracture and suffered a contusion on the head with a large forehead hematoma, with 100% eschar and periwound skin bruising from the fall, present 16 days. No prior care.

Rationale

Polymeric Membrane Dressings* (PMDs) were chosen to manage the challenging wounds because PMDs control inflammation, which reduces secondary cell damage, which in turn, reduces swelling and pain, all of which encourages wound healing. Caregiver can participate in wound care when using PMDs because of the dressings' ease of use, reduced pain when using PMDs and their successful use in managing virtually all types of wounds in the home health care setting.

Since 2022, Roper St. Francis Home Health has cared for approximately 30 wound patients using PMDs. The dressings have been recommended by the patients' discharge sites including wound clinics, hospital discharge planners, and consulting home health CWON. As a result of the observed, excellent outcomes, PMDs are now more frequently initiated by nurse case managers at this facility.

Methods

All wounds cleansed with a wound cleanser or normal saline at dressing changes as per HH policy Patient 1: PMD extra-thick applied 5 days after admission and secured with gauze.

Patient 2: standard PMD applied 14 days after initial assessment. Patient was already with HH. Patient 1 and 2, PMDs changed 1x per week, as needed. Patient 3: Standard PMD applied 88 days after admission. Dressings changed 1-2x per week, as needed. Patient 4: sharp debrided, gauze absorbent daily dressing which was stopped when PMD initiated. PMD extra-thick initiated 11 days after admission. PMD changed 2x per week.

Results

With prior wound care, wounds were slow healing but after PMDs initiated these challenging wounds closed with no complications: Patient 1: No pain with PMD dressing changes, wound closed in 41 days. Patient 2: In this high-level care complex patient, DTPI opened to stage 3, red granulating wound. Which closed in 126 days; PMDs changed 3x/wk. decreasing to weekly. Patient 3: In spite of Sweet Syndrome and intermittent chemotherapy treatments, wound closed in 111 days. Patient discharged with wound closure and chemotherapy resumed. Patient 4: After 2 dressing changes with PMDs, bruising resolved. Wound almost closured at 56 days. PMDs did not stick and cause bleeding which is a concern for patients on blood thinners. Patient wanted a less noticeable dressing on the forehead but appreciated the comfort PMDs provided and ease of use for the family; Bismuth Tribromorphenate applied under small adhesive dressing to closure for 14 days.

Discussion

Continued improvement of wound healing during application of PMDs. PMD provided optimal moisture balance and absorbency of exudate, there was no maceration or other periwound skin complications. Easy to use PMDs decreased complications, decreased dressing change frequency and nursing visits. The ease of use of PMDs allowed for the caregivers for patient 1 and 4, to provide scheduled wound care with HH nurse supervision and meet the independence goals of patient/caregiver. PMDs are a multifunctional dressing for variety of wounds and improve wound healing to closure.

POLYMERIC MEMBRANE DRESSINGS (PMD) EXTRA-THICK VS OTHER FOAMS USED

- PMDs have higher absorbency and therefore longer wear time
- Not as drying
- Better conformity to uneven wound bed
- Can cut the non-bordered PMDs if needed and get 2 dressing changes (depends on size of the wound and important to cover periwound skin well)
- Does not stain periwound skin
- PMDs have an extensive configuration of sizes and shapes

Bibliography

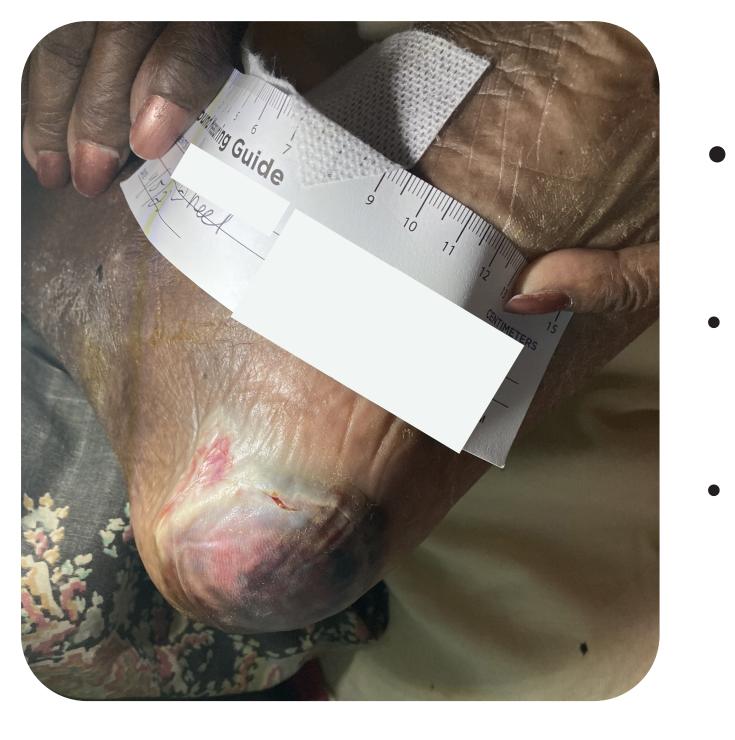
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*PolyMem® Wound Dressings, PolyMem MAX® Ferris Mfg. Corp.,5133 Northeast Parkway, Fort Worth, TX 76106 USA 1-800.POLYMEM (765.9636) www.polymem.com This case study was unsponsored. Ferris Mfg. contributed to this poster presentation.

PATIENT 2

Deep Tissue Pressure Injury- Left Heel

PATIENT 4 Left Forehead Hematoma



- 7 days after the initial application of Polymeric Mem brane Dressings (PMDs) Fluid filled blister has broken and draining moderate serosan
- guineous exudate Wound Measurement: 6 cm x 7.5 cm



Pre sharp debridement and subsequent application of Polymeric Membrane Dressings

With sharp debridement, the

Post sharp debridement

Bruising wound edges

Wound Measurement:

4.5 cm x 3.7 cm x 0.5 cm

Extra-thick PMD applied, and

secured with paper adhesive

Initial application (PMDs)

wound was bleeding and pres-

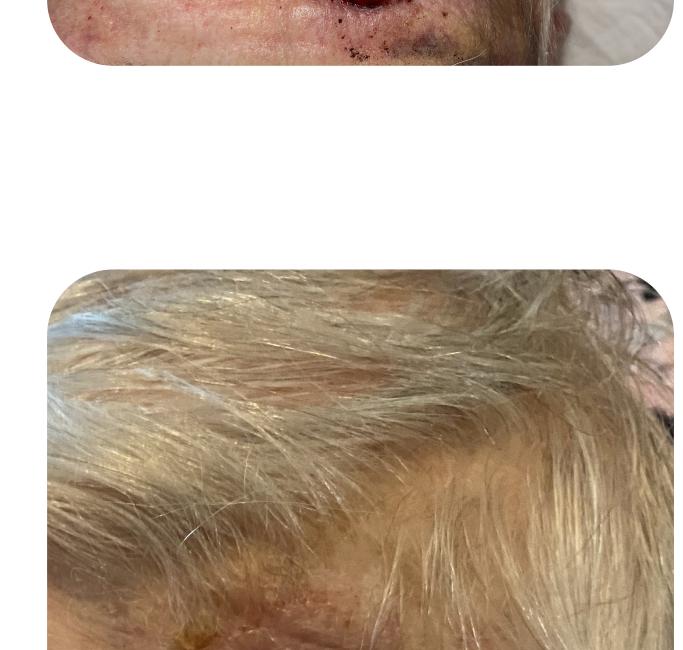
Scant serosanguineous exudate



- 35 days after the initial application of PMDs
- Draining moderate serosanguineous exudate
- PMDs were changed every oth
- er day due to increased exudate DTPI opened to stage 3 pres-
- sure injury Wound Measurement: 4.5 cm x 3 cm x 0.2 cm



- 42 days after the initial
- application of PMDs Wound is granulating



- 28 days after the initial application of PMDs
- Wound granulating

sure applied

- Scant serosanguineous exudate Wound superficial, bruising resolved on wound edges
- Wound Measurement: 1.7cm x 1.3 cm x 0.1 cm



- 63 days after the initial
- application of PMDs Wound Measurement:
- 2.8 cm x 3 cm x 0.1 cm Wound continues to granulate
- and get smaller Wound closed in 126 days No additional photos available



- 56 days after initial application of PMDs Wound almost at closure
- Wound Measurement:
- 0.7 cm x 0.7 cm x 0.1 cm