

### **CASE STUDY**

# Heel Ulcer in Hospice Patient Closed Quickly Using PolyMem Silver® Dressings



**INITIATION OF TREATMENT** 



COMPLETELY CLOSED 10 WEEKS LATER

## Heel Ulcer in Hospice Patient Closed Quickly Using PolyMem Silver Dressings

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#### **PROBLEM**

A frail but alert woman with end-stage dementia, peripheral arterial disease, peripheral venous disease, a nutrition deficit and a compromised immune system who was close to 100 years old developed a 3.0 cm x 3.0 cm blister to her R heel which was initially treated with a transparent dressing. The heel was floated, thereby redistributing the weight, and the patient was placed on systemic antibiotics. The blister broke open spontaneously after a week. For the next ten days various clinicians tried differing wound treatments, each for only a few days, including collagenase covered with a thin film dressing, hydrocolloids, polymeric membrane dressings, and hydrogels. The woman appeared to be in pain and the wound, which probed to bone, was increasing in size. At that point the author was able, with a two-day exception, to choose a consistent treatment.

#### **RATIONALE**

This patient was so debilitated that her heel ulcer was not expected to close. Her foot was cold, with poor capillary refill and an absent pedal pulse. Dressings were needed to prevent any infection from becoming systemic and to contain the wound exudate. Shapes® by PolyMem dressings conform well to heels and have a semipermeable membrane to protect wounds from contamination. They contain glycerol, a surfactant, and a super-absorbent starch. PolyMem dressings' ingredients draw and concentrate natural healing substances from the body into the wound bed to promote rapid healing while facilitating autolytic debridement directly by loosening the bonds between the slough and the wound bed. The liquefied slough is absorbed by the dressing, often eliminating the need for potentially damaging and painful manual wound bed cleansing during dressing changes. Together the dressing's components reduce wound pain by inhibiting nociceptor activity at the wound site.

In the absence of sufficient nutrients from the bloodstream, the glycerol in PolyMem dressings can be utilized by the body as an energy source and a component of new cells. The decision was made to use only silver or standard pink PolyMem dressings (including Shapes by PolyMem), depending upon the condition of the wound bed.

#### **METHODOLOGY**

The author used PolyMem Silver dressings initially. The wound bed contained 100% granulation tissue after ten days, so the silver was discontinued in favor of standard pink PolyMem dressings. PolyMem Silver dressings were used a month later for five more days when the exudate quantity increased slightly, indicating possible increased bioburden. PolyMem dressings were changed when 75% saturated or every 7 days. No wound bed cleansing was done at dressing changes. PolyMem dressings were continued to complete wound closure.

#### RESULTS

The wound closed without further antibiotics in only ten weeks and remained closed. The patient was placed in hospice during the wound treatment. Dressing changes were very quick and used very few supplies because no manual wound bed cleansing was needed.

#### CONCLUSION

Consistent use of PolyMem dressings resulted in this wound closing, which was far beyond the expectations of the patient's caregivers. Because no wound bed cleansing was needed, the delicate new structures in the wound bed were not disturbed and the wound was not cooled at dressing changes. Since the patient had very little circulation to the area and was nutritionally compromised, glycerol from the dressings may have been metabolized in the wound bed to provide energy and some of the cell components needed to close the wound.



MAY 4
3.0 cm x 6.0 cm
Heel ulcer open one
month; Shapes by
PolyMem Silver
dressings for two
weeks.



MAY 25
2.0 cm x 5.0 cm
Shapes by PolyMem
Silver dressings for five
days due to increased
exudate.



JUNE 4
1.2 cm x 5.0 cm
PolyMem dressings are keeping the deep structures moist.



JUNE 11
1.5 cm x 5.0 cm
The wound has divided into two areas and the structures are mostly covered.



JUNE 15
1.2 cm x 5.0 cm
Routine cleansing,
which cools and can
slow healing, was not
performed.



JUNE 25 0.9 cm x 0.5 cm Glycerol from the dressings can be converted to energy at the wound site.



JULY 5
Almost closed
PolyMem dressings
keep wound moisture
appropriate.

#### **OBJECTIVES**

- Discover that PolyMem dressings contain glycerol, which is released into the wound bed and can be utilized by the body as a component for new cells or as an energy source directly at the wound site.
- Consider the advantages of using PolyMem dressings in terms of passive continuous cleansing of the wound bed (which often eliminates painful, wound cooling and time-consuming wound cleansing during dressing changes).
- 3. Review evidence for the use of PolyMem dressings in the treatment of wounds in immune compromised patients.

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JULY 11 Closed in 10 weeks Patient is almost 100 years old and in hospice, but her wound closed!



#### Ferris Mfg. Corp.

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