



Huge Sacral Pressure Ulcer Closed in Four Months Using Silver Polymeric Membrane Cavity Filler and Dressings



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PROBLEM

An alert 85-year-old diabetic woman was diagnosed with a pressure ulcer five days after she was admitted to the hospital for pneumonia. Her wound pain was 10 on the faces scale despite analgesics. The nurses at the hospital were using povidone iodine 10% ointment on the ulcer and were unwilling to change to another treatment. The wound deteriorated; when the patient was dismissed to the geriatric nursing home one-half of her gluteus maximus muscle was necrotic and had to be surgically removed. Her pain was now 7 – 8 on the faces scale.



1 Sept 06: Initial Assessment in Hospital. Necrotic hard tissue extended deep into the muscle. Wound deteriorated using IV antibiotics & povidone ointment. Pain: 10.



13 Sept 06: After surgical debridement. 4+ pseudomonas. Began silver polymeric membrane cavity filler changed twice daily. No systemic medications. Pain: 7 - 8

The geriatric nursing home placed the patient on an air-bed mattress. Her gaping yellow-slough-lined strong smelling wound with 4+ pseudomonas needed quick healing to minimize the patient's discomfort as well as treatment costs. Considering her comorbidities, avoiding the use of systemic antibiotics and their inherent side-effects was important as well.

RATIONALE

The author chose polymeric membrane dressings and cavity filler* because they are not ordinary foam – they have several key integral components which draw and concentrate healing substances from the body into the wound bed to promote rapid healing. The built-in wound cleanser facilitates autolytic debridement directly by loosening the bonds between the slough and the wound bed. No manual wound cleansing is usually needed, allowing for less disruption of the new growth at the wound bed and very quick and easy dressing changes. The glycerol in the dressing prevents sticking and protects the periwound from maceration. Starch co-polymers give the dressings superior absorption, and a thin semi-permeable film backing optimizes moisture and protects the wound. Together these components also allow polymeric membrane dressings to hydrate the wound bed when needed and help decrease pain. Polymeric membrane dressings also insulate the wound, helping maintain a steady warm temperature, which speeds healing.

Silver polymeric membrane dressings are effective against pseudomonas, so we felt using this product could keep the patient from requiring antibiotics. Recently several other modern silver dressings were shown to be severely cytotoxic in vivo, but cells in contact with silver polymeric membrane dressings proliferated. This further affirms the author's decision to use silver polymeric membrane dressings on this patient's wound.

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METHODOLOGY

Layers of Silver polymeric membrane cavity filler were placed into the wound bed and covered with a silver polymeric membrane secondary dressing to prevent leakage. These were changed twice daily at first, then daily, then every three days. No systemic or topical antibiotic therapy was added. For one month after the wound closed, polymeric membrane dressings were continued on the scarred area to reduce pain and protect the fragile new soft tissue. These dressings were changed every 4 – 5 days.

OBJECTIVES

1. Discuss the advantages of polymeric membrane dressings having a built-in wound cleanser, which minimizes disruption to the wound bed tissue and maintains desirable wound temperature.
2. Note the quick healing with polymeric membrane dressings, which dramatically decreases costs and provides comfort and convenience to the patient.
3. Consider the role that polymeric membrane dressing's support of autolytic debridement played in healing this wound.

RESULTS

The cleansing provided by the polymeric membrane dressings supported rapid autolytic debridement and completely eliminated the need for wound cleansing at dressing changes, helping maintain an appropriate wound temperature and promoting quick healing. **Within two weeks the woman's pain was completely gone** without the need for analgesics. **At four weeks wound cultures were negative.** At ten weeks the wound was shallow, so the silver polymeric membrane cavity filler under the silver polymeric membrane dressing was discontinued. **The wound closed completely in only four months.**

CONCLUSION

Healing was remarkable considering the patient's debilitated state. The many unique properties of the polymeric membrane dressings directly influenced the rapidity of the healing and freedom from pain this elderly diabetic woman experienced.

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*PolyMem® Dressings and PolyMem Wic® Silver Cavity Filler are made by Ferris Mfg. Corp., Burr Ridge, IL 60527 USA



30 Sept 06: After only 2½ weeks, yellow slough and exudate are already reduced without additional cleansing or rinsing. Dressing changes are now daily. Pain is 0!



14 Oct 06: Cultures are negative after one month of using only polymeric membrane dressings. The wound is much smaller, as well, with granulation instead of slough.



5 Nov 06: Wound continues to decrease in depth, undermining and circumference using silver polymeric membrane dressings changed daily with no cleansing.



28 Nov 06: Wound is now shallow – silver polymeric membrane cavity filler is discontinued. Silver polymeric membrane dressing is now changed every two days.



4 Dec 06: The exudate is further reduced. Silver polymeric membrane dressings are now changed every three days without additional wound cleansing. Still pain free.



20 Dec 06: The wound continues to fill in rapidly. It is staying warm under the polymeric membrane dressing. Dressing changes are quick and easy: no rinsing.



2 Jan 07: The wound is almost closed. The patient has had no antibiotics and no pain medications. She has had no infection or pain since the 2nd week of the new treatment.



15 Jan 07: The wound is closed. For the next month, polymeric membrane dressings, changed every 5 – 6 days, help prevent pain and protect the fragile new soft tissue.