

Chronic Venous Leg Ulcer Closed in Only Seven Dressing Changes Using Silver Polymeric Membrane Dressings*

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CLINICAL PROBLEM

A 28 year old male presented on September 12th at the outpatient wound clinic with a chronic non-healing right lower leg ulcer. The wound was present for 9 months prior to attending the clinic. The patient had a history of untreated Crohn’s disease, venous stasis and tobacco addiction with a 2 pack/day history. The patient continued employment as a bartender with long periods of standing because of limited finances. He complained of continuous right leg ulcer pain. Suspected pyoderma gangrenosum was ruled out. Previous wound care treatments included sharp and enzymatic debridement, wet-to-dry dressings, topical antimicrobial treatments, and oral antibiotic therapy based upon a wound culture, all with little improvement. The right lower leg ulcer measured 4.5 cm x 3.7 cm x 0.3 cm and had an unhealthy yellow wound base.

CURRENT APPROACH

New wound care management was initiated on October 4th: a silver polymeric membrane dressing was applied with a compression wrap at 30-40mm Hg. The dressing and wrap remained in place for 7 days without maceration. The dressing and wrap was changed weekly until wound closure. The polymeric membrane dressing was able to deliver the wound care functions needed in one easy-to-use dressing. Frequently this clinician will switch from silver to standard polymeric membrane dressings when the wound bed appears pink and granulating. Silver polymeric membrane dressings were utilized to complete wound closure in this case because of the patient’s history of infection.

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PATIENT OUTCOME

A total of only seven 4 x 4 silver polymeric membrane dressings were utilized for this patient's care. This dressing saved time because no cleansing of the wound bed or protecting the peri-wound skin area was needed at dressing changes. Also, less time was spent removing the dressings because there was no adherence to the intact skin or wound bed. **The need for wound pain medications was completely eliminated.**

The wound appeared much cleaner and pinker with the use of silver polymeric membrane dressings. There was very little fibrin build-up with the use of this dressing compared to the antibacterial cream moist dressings or even the topical debriding ointment.

When the other dressings were used, the wound bed was irrigated with normal saline or sterile water. No cleansing of the wound at dressing changes was done when the silver polymeric membrane dressing was used. The intact lower leg skin was washed with mild soap and moisturized under the compression wrap to maintain healthy skin integrity. Care was taken to not wash, irrigate or disrupt the wound bed.

The patient’s pain decreased with use of the silver polymeric dressing and compression therapy was tolerated. The right lower leg ulcer healed within 6 weeks of the initiation of silver polymeric membrane dressings; this represents a dramatic improvement in healing time.

Pain was significantly reduced for this patient with the use of silver polymeric membrane dressings. There was a decrease in the frequency of dressing changes, decrease in bacterial load, and decrease in fibrin build up which meant that painful debridements were not needed. Additionally, the dressings are very comfortable because they absorb exudate and do not adhere to the wound bed or to intact skin.

OBJECTIVES

1. Discuss possible complications interfering with healing in chronic venous stasis ulcers.
2. Discuss the combination of silver polymeric membrane dressings and compression therapy for healing venous hypertension ulcers.
3. Identify polymeric membrane dressings to be cost effective when managing wound healing.

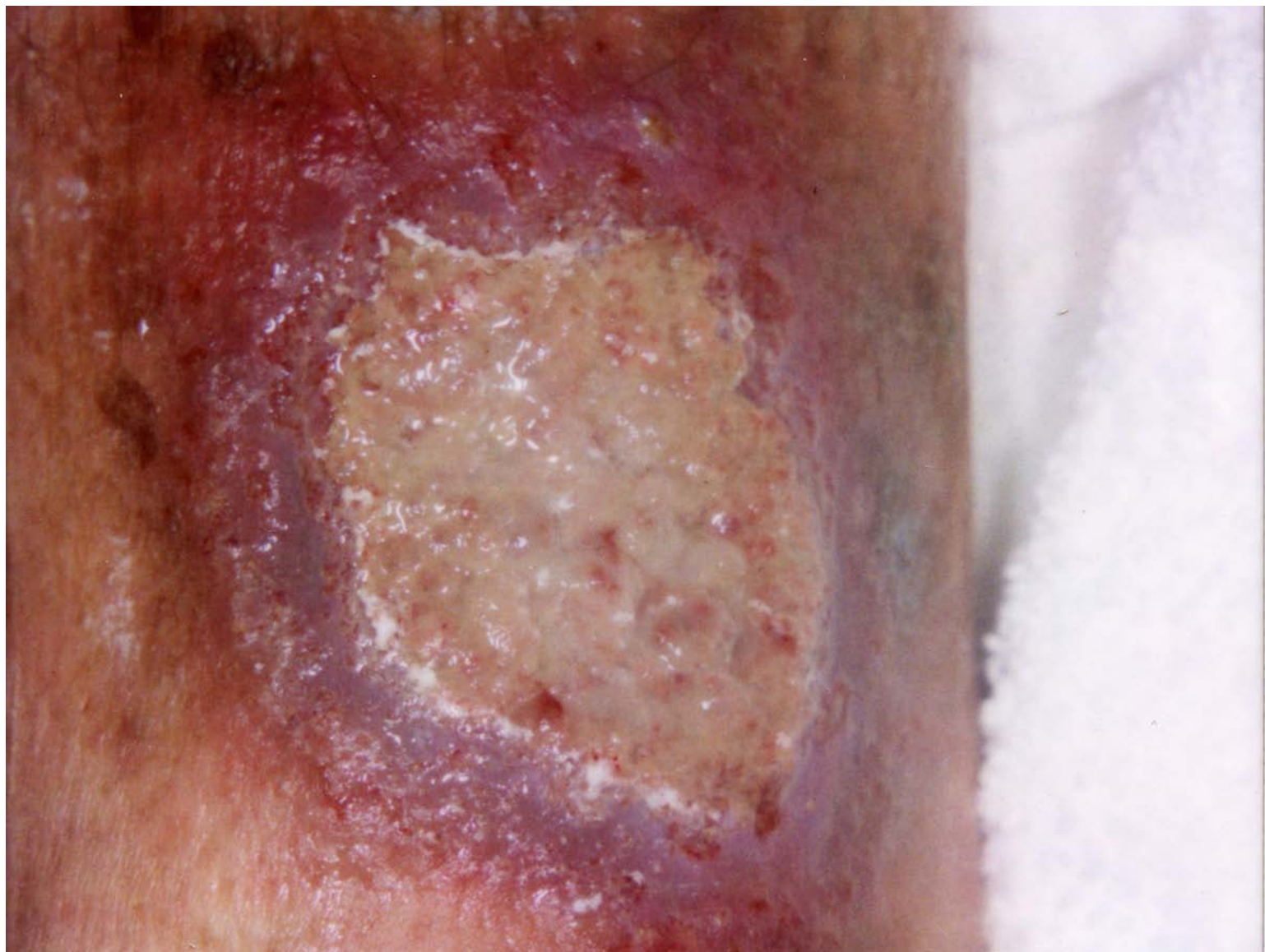
CONCLUSION

Silver polymeric membrane dressings were used in combination with compression therapy for successful management/healing of this venous hypertension wound. The silver polymeric membrane dressings’ reduction in the patient’s wound pain allowed the patient to tolerate clinically therapeutic compression. The silver polymeric membrane dressing was effective for managing pain, managing exudate, decreasing bacterial count, providing moist wound healing and eliminating the need to debride the wound bed, while improving healing time. The patient exhibited no signs of maceration to the wound or peri-wound area, even though the dressings were only changed weekly. Also, silver polymeric membrane dressings were ideal dressings because of their relative low cost combined with their ease of use and the reduction in number of dressing changes required to reach complete closure. In short, the silver polymeric membrane dressings were both cost effective and time efficient.

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*PolyMem® Silver™ Wound Dressing, Ferris Mfg. Corp., Burr Ridge, IL 60527



September 27: 4.5 cm x 3.7 cm x 0.3 cm. 100% yellow slough tissue visible in the wound bed. Erythemic periwound skin. Hemosiderin deposits present.



October 4: Silver polymeric membrane dressing initiated with compression therapy.



October 11: 2.8 cm x 2.2 cm. 100% granulation tissue present in the wound bed. Erythema of periwound area decreased.



November 1: 0.8 cm x 0.7 cm. Wound healing well. Re-epithialization occurring.



November 8: 0.4cm x 0.1cm. Wound continuing to heal. Silver polymeric membrane dressing was utilized until November 15 when the wound was closed.