

CASE STUDY

Complicated Skin Tears Improved Quickly With PolyMem® Dressings



BEFORE



AFTER

Complicated Skin Tears Improved Quickly With PolyMem Dressings

PROBLEM

A frail but ambulatory 80 year old man with diabetes, rheumatoid arthritis, peripheral vascular disease, coronary artery disease and history of stroke, who regularly takes warfarin sodium and prednisone, fell and hit his right arm on a bathroom fixture. The resultant 30 cm x 8.7 cm x 0.5 cm skin tear with exposed fascia and radius was treated initially with multiple adhesive strips at the hospital. It was then dressed at the wound clinic with 0.1% gentamicin ointment covered with non-adherent ABD pads. Home health services were enlisted to provide daily dressing changes. The patient was scheduled to return to the wound clinic for follow-up weekly. Despite the gentamicin ointment, the dressings stuck to the wound, which bled copiously as a result. *After two dressing changes the patient's daughter stated that she was alarmed by the bleeding and painful sticking and requested that the treatment be changed to PolyMem dressings, which she supplied.*

RATIONALE

PolyMem dressings contain both glycerol and a super-absorbent starch, so they add moisture to dry wounds (such as exposed bone and fascia) while absorbing large quantities of exudate. Glycerol in the dressings also prevents them from sticking. PolyMem dressings also contain a built-in wound cleanser, so usually no manual wound cleansing is needed, greatly diminishing the likelihood of breaking open vessels in the wound bed and causing bleeding at dressing changes. The dressings continuously loosen and absorb wound exudate and slough, diminishing the risk of infection.

METHODOLOGY

Blood was cleansed from the wound gently with normal saline. PolyMem dressings were applied and changed by home health nurses every two-to-three days. The home health nurses cleansed the wound only when clots or necrotic tissue were present, using normal saline. No ointment was applied. At the weekly wound clinic visits the wound was cleansed with normal saline, photographed and measured, assessed by a physician and gentamicin ointment was applied. PolyMem dressings were continued to complete wound closure, with the patient's wife performing many of the later dressing changes herself.

RESULTS

PolyMem dressings did not stick to the wounds, and the fascia and radius stayed moist until they were covered with new tissue. Using PolyMem dressings, there was no bleeding upon dressing removal. The wound beds stayed clean and granulated quickly. Despite the patient's comorbidities and prednisone use, the wounds closed completely within 90 days.

CONCLUSION

PolyMem dressings were easy to apply and effective. They did not stick to the wound, so the wound did not bleed when the dressings were removed. The dressings were effective at keeping the wound bed clean so that the home health nurses did not need to do manual wound cleansing at dressing changes. This massive deep skin tear closed in only 90 days, much faster than expected with the use of other dressings.

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March 5

Patient treated in the ER over the weekend arrived with 30 cm x 8.7 cm x 0.5 cm wound. Dressed with gentamicin ointment and non-adherent ABD pads to be changed daily. Dressings stuck, leading to profuse bleeding. After two days, home health changed to PolyMem dressings.



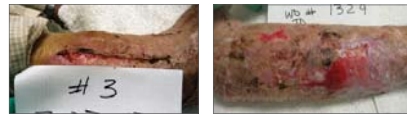
March 12

First weekly clinic follow-up visit. Dressing changes performed by home health every 2 – 3 days. Infrequent saline rinses, so new tissue growth was rarely disrupted. PolyMem dressings easily removed without bleeding or sticking. MD agreed to continue PolyMem dressings.



March 19

Second weekly clinic follow-up visit. Adhesive strips removed. Dramatic healing in less than two weeks of PolyMem dressing use. Exposed fascia and radius are completely covered, all Stage III areas of skin tear are granulating well, and very little bruising remains.



March 27

After less than three weeks of PolyMem dressing use, the original 30 cm x 8.7 cm x 0.5 cm skin tear is a series of small superficial wounds, with no bleeding during dressing changes and no signs of infection.



April 16

At six weeks of PolyMem dressing use, all bruising and edema is resolved, and only one significant wound remains, which is filling in steadily. The patient's healing rate is amazing, especially considering his advanced age, tendency to bleed, prednisone therapy and diabetes.



May 1

Wounds continue to heal without complications.



May 14

Dismissed to care of family. Closed in early June.



July 8

Four months post injury (one month post complete wound closure).

OBJECTIVES

1. Review evidence for the use of PolyMem dressings on skin tears.
2. Consider the advantages of using PolyMem dressings in terms of passive continuous cleansing of the wound bed, which often eliminates time-consuming and potentially traumatic wound cleansing during dressing changes.
3. Discuss the importance of PolyMem dressings' complete non-adherence to the wound bed on the healing of this patient, particularly considering his increased bleeding times and decreased ability to heal due to medications.

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