

DEEP ULCER ON CHARCOT FOOT CLOSED AFTER TREATMENT WITH POLYMERIC MEMBRANE SILVER CAVITY DRESSING*

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BACKGROUND

A 38 year old woman with type 1 diabetes contracted a deep malodors pressure ulcer on the sole of her Charcot foot due to improper footwear.

She was treated at the orthopedic clinic where she was given daily foot baths with Povidone Iodine 10% diluted in water and wound dressings with Cadaxomer Povidone Iodine on a daily basis. She was also on systemic antibiotics for a Pseudomonas infection. The wound was 7 x 6 cm and 4 cm deep with exposed bone and was constantly macerated due to huge amounts of purulent exudates.

The patient suffered over the odor and copious amounts of exudate and felt very self conscious when she went out.

After five months her wound was still deteriorating. Amputation was under discussion. As a last resort she was sent to the wound clinic for an evaluation.

AIM

To find a dressing regime that could handle the large amount of exudates and decrease the bioburden giving the wound a chance to heal.

METHOD

Polymeric membrane wound filler wicks exudate directly away from the wound surface while facilitating autolytic debridement by loosening the bonds between slough and wound bed. The liquefied slough is absorbed into the dressing and excess fluid wicks through the filler into the absorbent polymeric membrane cover dressing. Both the filler and the cover dressing contain glycerine to soothe and hydrate the wound, and a surfactant to continually cleanse the wound. The silver version of these dressings has additional antimicrobial properties.

Treatment with polymeric membrane silver cavity dressings were initiated with twice daily dressing changes due to the high exudates levels the first weeks.

Specialized off-loading orthopedic shoes were made by a podiatrist.

RESULTS

After 3 weeks the antibiotic treatment was discontinued and daily dressing changes were sufficient.

After 6 weeks a swab verified that the wound was no longer contaminated by Pseudomonas and regular Polymeric membrane dressings without silver were used. After a total treatment time of less than 4 months the deep ulcer had healed completely.

CONCLUSION

We saw fast results when it came to cleansing, reduction of pain and odor and wound healing.

Dressing handling and application were very easy.



Left photo: 23 December 6 x 7 cm 4 cm deep with bone contact

The wound has been continuously deteriorating for the past five months in spite of daily dressings with cadaxomer povidone iodine and daily povidone foot baths at the orthopedic clinic. The wound is extremely malodorous and produces copious amounts of exudates which is very distressing for the patient. As a last resort, since amputation had been discussed, she was sent to the wound clinic where polymeric membrane silver dressings were initiated. Dressing changes twice daily due to the high exudate level.



Right photo: 15 January

The exudate level has decreased and with that the frequency of dressing changes. Note how the size of the wound has decreased and become more shallow. There is still bone contact in the deep pocket in the middle of the wound. The patient has received custom made orthopedic shoes.



Left photo: 30 January

There is no longer any odor from the wound. A swab taken a couple of days after this photo confirmed absence of Pseudomonas. We then stopped using the silver and went over to the regular version of polymeric membrane dressings. The clinician was reluctant to remove the dry skin with a surgical blade due to the risk of traumatizing the healthy skin.



Right photo: 27 February

The wound is filling up nicely with new granulation tissue. It is now hard to believe that this foot was at risk for amputation one month ago. Dressing change once a day. No cleansing during dressing changes needed.



Left photo 28 December when amputation was being discussed as an option.



Right photo 7 April, wound closed after 3,5 months treatment with polymeric membrane dressings.

*PolyMem® wound dressing and PolyMem Wic® cavity dressing (with or without silver)
Manufactured by Ferris Mfg Corp, Burr Ridge, IL 60527 USA.
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