

Introduction

Diabetic foot lesions are prevalent in Malaysia as the incidence of Diabetes Mellitus amongst the population is increasing tremendously. Currently 20 % of the 28 million population of Malaysia are suffering from the disease and a quarter of this number have diabetic foot complications. Healing is slow and new therapies are needed to help accelerate the healing of these wounds.

Methodology

10 diabetic patients with foot ulcers which show poor healing were recruited in this case series. The TIME concept was used to assess the wounds. Wounds were in the inflammatory phase of wound healing and therefore there was a delay in wound epithelialization. There was no clinical sign of infection and exudates were minimal. The wound bed was prepared by cleansing, debridement and dressing with offloading.

The wounds were cleansed with water for irrigation. Callosity was debrided if present and treatment was initiated with the collagen and glycerine based gel. Patients were seen every 48-72 hours for the next dressing change.

Case Study 1

8 week old Diabetic foot ulcer which resolved after 56 days of application of the gel



Photo 1

Photo 2

Case Study 2

14 week old stagnant non healing ulcer which closed after 55 days with the collagen and glycerine based gel



Photo 1

Photo 2

Case Study 3

14 week old ulcer which was non healing and healed after 14 days



Photo 1

Photo 2

Case Study 4

14 week old neuropathic ulcer at the plantar aspect with callosity which closed in 35 days



Photo 1

Photo 2

Case Study 5

10 week old neuropathic ulcer with callosity started to close within 60 days

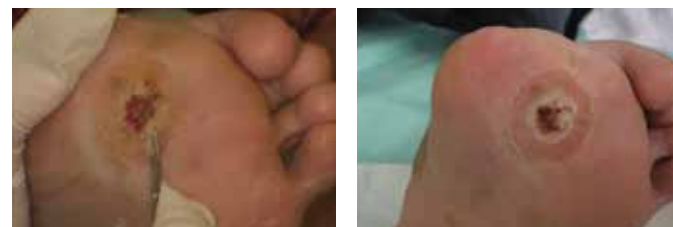


Photo 1

Photo 2

Case Study 6

4 year old chronic ulcer which started to close after 99 days of gel application



Photo 1

Photo 2

Case Study 7

2 year old ulcer with deformity which showed improvement within 222 days



Photo 1

Photo 2

Case Study 8

Diabetic foot ulcer with stitches closed within 13 days

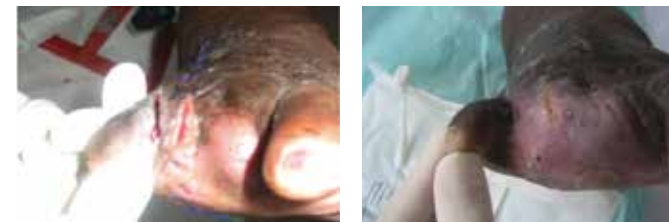


Photo 1

Photo 2

Case Study 9

Wound post Motor Vehicle Accident which started to close after 22 days



Photo 1

Photo 2

Case Study 10

Post accident wound which closed after 42 days of treatment



Photo 1

Photo 2

Results

All the 10 cases showed marked improvement in terms of wound healing and the ulcers epithelialized and healed well. The collagen and glycerine based gel showed its efficacy in accelerating the healing of the stagnant non infected wounds.

Conclusion

This collagen and glycerin-based gel is effective in improving the clinical outcome of diabetic foot ulcers in terms of epithelialization and healing. The collagen is effective in the fibroblastic phase of wound healing and helps in the healing of the chronic wounds. Wound healing is kick started with the collagen. Meanwhile, glycerine works as a cleanser to cleanse the wounds. The collagen and the glycerine work synergistically to improve the clinical endpoint of the cases.

References

- 1 Elgharably H et al "A Modified Collagen Gel Improves Wound Healing Outcomes In A Pre-clinical Model of Swine Excisional Wound" presented at the SAWC and WHS , Atlanta GA 2012
- 2 Rodrigues M and Caiafa J "Use of a collagen and Glycerine-based dressing for stimulating cicatrization in diabetic ulcers and wounds ; presented in EWMA 2008 Lisbon Portugal
- 3 Filho JM and Leal F ;"Use of modified collagen and glycerine-based dressings in patients with skin lesions-The experience of the Santa Casa De Misericordia" presented in the American Academy of Dermatology 64th Annual Meeting San Francisco , CA 2006
- 4 Noronha R and Meneses J ' Use of new technology in facial masks to treat cutaneous wounds in plastic surgery; presented in the EURAPS meeting Istanbul, Turkey 2006

Presented at

SAWC AND WHS
THE SYMPOSIUM ON ADVANCED WOUND CARE

Colorado Convention Center
Denver, Colorado

Presentation supported by
southwest technologies inc.

1746 Levee Road, North Kansas City, MO 64116
phone: (800) 247-9951 phone: (816) 221-2442 fax: (816) 221-3995
email: info@elastogel.com • website: www.elestogel.com