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### INTRODUCTION

Patients with diabetes and/or vascular disease are at high risk to have chronic wounds. Chronic wounds affect multiple body sites and are associated with significant morbidity and mortality. In 1999, the total economic cost in the United States was estimated to be $10 billion for treatment of leg ulcers alone. The prevalence of foot ulcers in diabetics has been estimated to be between 25% and 40%.1 In 2001, the total cost of treatment for all diabetes-related complications was estimated to be $80 billion annually in the United States.2

### CASE SERIES DEMONSTRATING THE IMPACT OF DEHYDRATED HUMAN AMNIOTIC MEMBRANE ALLOGRAFT (DAMA) ON WOUND HEALING IN ACUTE AND CHRONIC WOUNDS

#### RESULTS

The primary patient outcomes represented in this series were size and time to healing. The acute wounds were present for an average of 7 weeks (7.0 months) and the chronic wounds were present for an average of 17.5 weeks (8.8 months) before application of DAMA.

- **Case 1**
  - A 74-year-old male with history of chronic venous insufficiency with DVT presented with a traumatic wound to his lower leg. The wound measured 1.0 x 1.8 x 0.2 cm.
  - DAMA was applied after 1 month and marked improvement was noted within 2 weeks. The wound completely healed within 5 weeks following the second application.

- **Case 2**
  - A 75-year-old female with history of chronic venous insufficiency presented with a venous leg ulcer on his right medial malleolus. The initial wound measured 3.8 x 1.5 x 0.2 cm.
  - DAMA was applied after 3 months and marked improvement was noted within 2 weeks. The wound completely healed within 6 weeks following the second application.

- **Case 3**
  - A 70-year-old male with history of peripheral arterial disease (PAD) presented with a neuro-ischemic wound at the amputation site. The wound measured 3.0 x 2.5 x 0.2 cm.
  - DAMA was initiated at week 13 and marked improvement was noted within 2 weeks. The wound completely healed within 8 weeks following the third application.

- **Case 4**
  - A 80-year-old male with a history of diabetes and peripheral arterial disease presented with a chronic wound on the lower leg. The wound measured 6.0 x 4.5 x 0.2 cm.
  - DAMA was initiated at week 16 and marked improvement was noted within 2 weeks. The wound completely healed within 8 weeks following the fourth application.

### METHODS

All patients enrolled in the Wayne Memorial Wound Care Center for the acute wounds. DAMA was applied at week 0. For the chronic wounds, DAMA was applied after 1 week to demonstrate a 50% reduction in wound size after 4 weeks of treatment with advanced wound care and other standard of care. As for the chronic wounds, DAMA was applied after a mean of 4 weeks (7.0 months).

When application of DAMA on wound surface was completed, complete wound healing was defined as clearance of clinical signs or improvement of healing by 50% within 1 week. In both acute and chronic wounds, healing was defined as complete when the wound was smaller than 1 cm.

### CONCLUSIONS

- **In the current case series, DAMA has a positive impact on wound healing in a variety of acute and chronic wounds.**
- **In this clinical series, the primary impact of DAMA was noted on 17 chronic wounds that demonstrated median reduction of 50% in wound size within 3 weeks of treatment.**
- **DAMA was noted to significantly reduce wound size and increase wound healing compared to other advanced wound care treatments.**
- **Complete wound closure was noted within 1 week for 15 of 17 wounds.**

### References

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