

Efficacy of Particulate dHACM in Diabetic Foot Ulcerations, Chronic Lower Extremity Ulcerations and Other Wounds

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Desert Foot, November 19-21, 2014, Phoenix, AZ



Background

- Dehydrated human amnion/chorion membrane (dHACM) contains essential growth factors and extracellular matrix proteins, collagen, and reduces inflammation in chronic wounds.
- Published studies have shown that treatment of varying types of wounds with dHACM improves healing and closure rates.^{1,2,3}
- The dHACM allograft is available in a sheet form, but it is also available as a particulate that can be sprinkled onto the wound bed or suspended in normal saline and injected in the soft tissue under the wound bed and in the wound margins.

Purpose

Our analysis is intended to discern the effectiveness of dHACM particulate for the treatment of chronic lower extremity wounds of mixed etiopathogenesis.

References

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2. Zelen CM, Serena TE, Snyder RJ. A prospective, randomised comparative study of weekly versus biweekly application of dehydrated human amnion/chorion membrane allograft in the management of diabetic foot ulcers. *Int Wound J.* 2014;11(2):122-128.
3. Serena TE, Carter MJ, Le LT, et al. A multi-center randomized controlled trial evaluating the use of dehydrated human amnion/chorion membrane allografts and multi-layered compression therapy vs. multi-layer compression therapy alone in the treatment of venous leg ulcers. *Wound Repair Regen* 2014; doi: 10.1111/wrr.12227. [Epub ahead of print].

dHACM = EpiFix®, MiMedx Group, Inc., Marietta, GA
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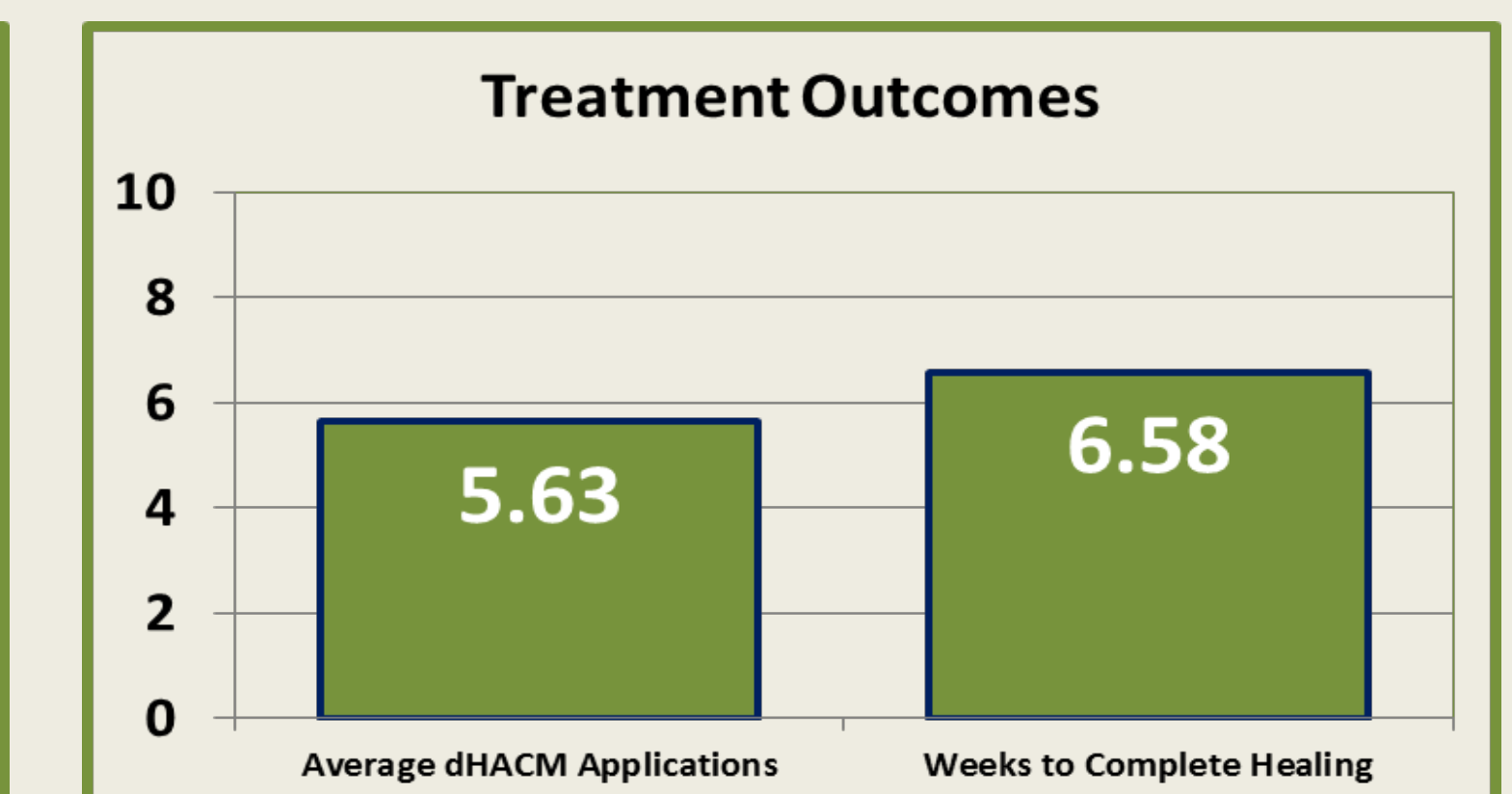
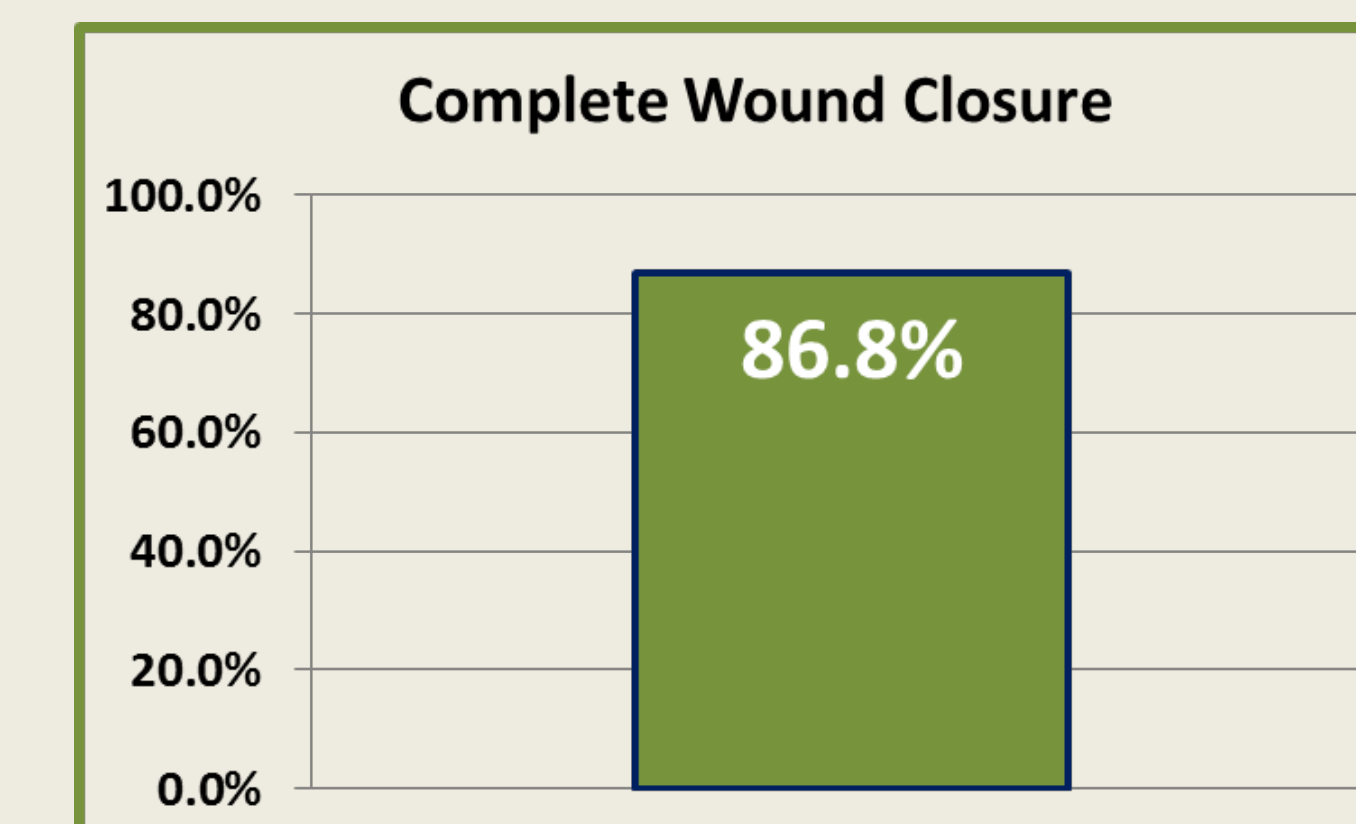
Methods

- A retrospective analysis of patients with chronic lower extremity wounds treated with dHACM particulate was conducted.
- Appropriate wound care was provided to all patients following 4-week established guidelines of standard treatment.
- Patients who did not meet the area calculation in dimensional reduction and expectations of wound size healing were then offered treatment with dHACM particulate.
- Treatment with dHACM particulate was initiated on 16 patients on the third or fourth subsequent visits approximately 30+ days post initial evaluation and treatment.
- Patients were reevaluated weekly and dHACM particulate was applied if deemed appropriate.
- Rate of complete healing, time to closure, and amount of dHACM used was evaluated.

Results

- A total of 21 total wounds on 16 patients were treated with dHACM particulate.

Example of case healed with dHACM particulate



Conclusions

- Treatment of wounds of mixed etiopathogenesis with dHACM particulate appears effective for accelerated healing rates of chronic DFU, traumatic and other types of lower extremity ulcerations.
- The mean healing rates and application interval lengths appear to closely approximate the already published data on the dHACM allografts.