Living Cells or Collagen Matrix: Which is More Beneficial in the Treatment of Diabetic Ulcers?

Reference:

Scientific Literature Review

Reviewed by: Shelly Levulis, DPM
Residency Program: Kennedy Memorial Hospitals, Stratford, NJ

Podiatric Relevance:
Wounds are a chronic issue that many podiatrists deal with on a daily basis. This study uses two products that are well known to the podiatric community. A comparison of Oasis and Dermagraft should aide in the choices that podiatrists make for treatment of wounds in their offices. Due to the high cost of these products, a study comparing closure rates should aide in the decision for the podiatrist to use these products.

Methods:
This study was a randomized, non-blinded analysis of 26 patients from 4 sites. 13 of the patients were treated with OASIS and 13 with Dermagraft. Dermagraft was allowed to be applied not more than 3 times and Oasis no more than 8, primarily due to cost. Both products were applied as directed and the wounds were followed up weekly for 8 weeks. Wound sizes were documented and photographs taken. Data collection was performed at 1,2,3,4,6,8,10, and 12 weeks.

Results:
No significant difference was seen between the two groups. The average initial wound size was 1.85 cm$^2$ +/− 1.83 cm$^2$ for the Oasis Group, 1.88 cm$^2$ +/− 1.39 cm$^2$ for the Dermagraft group. 10 wounds closed in the Oasis patients, while 11 closed in the Dermagraft patients. The average time to closure of the Oasis group was 35.67 +/− 41.47 days, and 40.90 +/− 32.32 days in the Dermagraft group. The average number of applied Oasis therapies was 6.46 +/− 1.39, while Dermagrafts was 2.54 +/− 0.78.

Conclusion:
There was no clinically significant difference in the rate of wound closure when comparing the products Oasis and Dermagraft in this study. The one difference was the number of applications between Dermagraft compared to Oasis.