A high-risk foot clinic was introduced at the Buffalo VAMC in order to determine the most effective treatments for healing diabetic foot ulcers (DFUs). This high-risk clinic incorporated evidence-based modalities. Data gathered from last year showed a reduction in amputations by incorporating a Preservation Amputation Care and Treatment (PACT) approach and using human fibroblast derived dermal substitute (HFDDS) for refractory patients. Since that time, newer technologies have arisen that offer potential advantages in efficacy, cost, and ease of use. A retrospective case series was analyzed to compare dehydrated amniotic membrane to HFDDS in order to determine which might be more advantageous for both patients and clinics.

Methods

- 12 patients were retrospectively evaluated.
- There were a total of 14 wounds included.
- All had failed prior therapy (<50% closure).
- Eight wounds had been treated with Dermagraft®, five with Oasis®.
- Each wound was treated with EpiFix® (dehydrated amniotic membrane) based on manufacturer's directions for use.

Results

- Over an 8 week period, the collective WAR (wound area reduction) for all 14 wounds was 57.7% (Table 1).
- Each wound received an average of 2.78 grafts.
- 3 patients were healed completely. Examples of healing rates seen in Graphs 1 and 2.
- 8 wounds were not responsive to Dermagraft® and were changed to EpiFix®. The estimated cost savings of this switch was $23,158 for these wounds alone based on Dermagraft® weekly dosing/directions for use (see Graph 3).
- A savings of $13,520 would still exist if Dermagraft® had been continued but dosed with the same frequency as EpiFix®.

Conclusions

- Multiple advantages were noted in using dehydrated human amniotic membrane to treat DFUs. Further research will be even more beneficial in increasing our understanding of the benefits of these technologies.
- Ease of product use and time management in busy clinic setting is an important consideration for clinicians. EpiFix® offers advantages over cryopreserved products since it is stored at room temperature and has a shelf life of five years.
- Cost savings is key when efficacy is not compromised. In this small retrospective case study, there was observed outcome improvement at a reduced cost.