Human Placental Connective Tissue Matrix in the Treatment of Chronic Wounds
A Prospective Multi-Center Case Series

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Introduction
In recent recent years, application of amniotic membrane has expanded to the treatment of diabetic and venous stasis ulcers, postsurgical wound dehiscence and chronic wounds. In this case series, we evaluated the efficacy of a Human Placental Connective Tissue Matrix Graft*. 

Methods
This prospective, multicenter case series evaluated wound healing time and wound characteristics of fifteen patients with various etiologies. Up to two, six cm\textsuperscript{2} pieces of the Graft\textsuperscript{\textregistered} were used per application on wounds ranging up to 44 cm\textsuperscript{2}. The average number of applications was 2 with a max of 4. Length, width, and depth measurements as well as percent granulation tissue were measured at each weekly visit using a wound imaging camera. The wounds were cleaned and debrided based on the physician’s discretion.

Results
All patients demonstrated a decrease in wound size and depth. There were no graft-related adverse events. The age of the ulcers ranged from 3 weeks to 4 years. There was also a notable decrease in wound exudate and odor in all ulcers treated.

For the diabetic and venous ulcer cases:
- The week 4 PAR (Percent Area Reduction) was 59% (71% diabetic and 50% venous).
- 62% (80% diabetic and 50% venous) of the cases had a week 4 PAR > than 40%.

For the diabetic and venous ulcer cases that started with a wound size < 20 cm\textsuperscript{2} and where one six cm\textsuperscript{2} Graft\textsuperscript{\textregistered} was used per application:
- The week 4 PAR was 70% (82% diabetic and 62% venous).
- 80% (100% diabetic and 67% venous) of the cases had a week 4 PAR > than 40%.

Conclusions
The Graft\textsuperscript{\textregistered} was effective in reducing wound size and improving wound bed characteristics in chronic wounds.

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*DermaVest

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$\text{Area Reduction in 25 days}$

$\text{Day 0 - 17.7 cm}^2$

$\text{Day 25 - 9.3 cm}^2$

$\text{48\% Area Reduction in 25 days}$

$\text{Day 0 - 44.0 cm}^2$

$\text{Day 49 - 18.2 cm}^2$

$\text{58\% Area Reduction in 49 days applying only three 6 cm}^2$ DermaVest total – one per week for the first three weeks