

# ▶ MIAMNION® DUAL FOOT ULCER

CASE STUDY

# MIAMNION®

## ▶ CLINICAL HISTORY

In August 2017, a 60-year-old male, and the husband of an employee of Legacy Donor Services Foundation (a VIVEX® Biologics partner), with peripheral neuropathy developed a Stage 2 ulcer on the bottom of his left foot. The ulcer was debrided and oral antibiotics were prescribed. Over the next 2 years, the ulcer progressively increased in size (depth and width). Since it was painful for him to put extended pressure on his left foot, he was forced to use a walker and could no longer go to the gym or work in the yard. The chronic foot ulcer was severely impacting his mobility, quality of life and mental health.

The patient developed osteomyelitis and underwent two 6-week courses of IV antibiotics via a PICC line. By June 2019, the osteomyelitis had progressed to his hallux, or great toe, and ultimately required amputation [Figure 1]. After the amputation, the ulcer did not resolve [Figure 2], and was continuing to pose a significant health and financial burden on the patient and his family. They were desperate for a solution and even considered amputation of the foot to eliminate the chronic foot ulcer. In October 2019, the Legacy Donor Services Foundation employee asked if VIVEX Biologics would collaborate with the patient's infectious disease physician to treat the ulcer with an amniotic tissue allograft in hopes of it healing.



Figure 1: Post amputation of the hallux



Figure 2: Ulcer prior to MIAMNION Dual Amnion treatment

## ▶ APPLICATION OF THE VIVEX MIAMNION DUAL AMNION TISSUE ALLOGRAFT AND OUTCOME

To address the patient's condition, the VIVEX Biologics team worked with the patient's infectious disease physician to determine the appropriate amniotic tissue allografts to treat the ulcer. The physician debrided the ulcer prior to each MIAMNION Dual Amnion application [Figure 3]. The chronic foot ulcer demonstrated healing with each application [Figures 4 and 5], and after three applications the ulcer had completely healed [Figures 6 and 7]. Subsequently, the patient was able to resume daily activities, including getting back to the gym and working in his yard.



Figure 3: Debridement of the ulcer prior to MIAMNION Dual Amnion application



Figure 4: Healing observed after the 1st MIAMNION Dual Amnion application

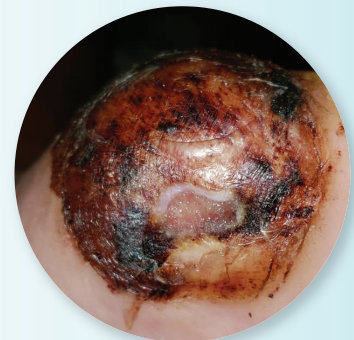


Figure 5: Additional healing observed after the 2nd MIAMNION Dual Amnion application



Figure 6: Ulcer has healed



Figure 7: Ulcer has healed

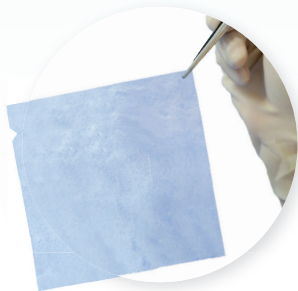
## ▶ CONCLUSION

This case study demonstrates the use of VIVEX Biologics MIAMNION Dual Amnion tissue allograft as a barrier membrane to help resolve a chronic foot ulcer and prevent the need for additional amputation. The MIAMNION Dual Amnion tissue allograft is easy to apply, is available in multiple sizes and will conform to wounds. The patient and his family were amazed that the ulcer was completely healed after treatment of the MIAMNION Dual Amnion tissue allograft and said, "We are so thankful for this LIFE-SAVING amniotic tissue allograft. Some may consider it life-enhancing but, for us, it was life-saving."

### TRADITIONAL SINGLE LAYER AMNION ALLOGRAFT

- Derived from the amnion layer of the placental membrane
- Offered in large sizes to meet physician needs
- Ideal for numerous surgical and soft tissue applications

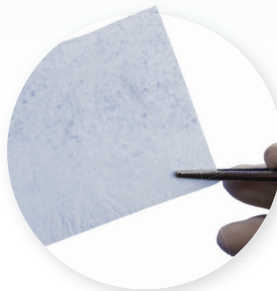
*Immune privileged anatomical barrier<sup>1</sup>*



### DUAL LAYER AMNION ALLOGRAFT

- Derived from the amnion layer of the placental membrane
- Approximately 2X thicker than traditional single layer amnion
- Available in large sizes for a wide variety of applications

*Proprietary dual layer technology*



### AMNION/CHORION LAYER ALLOGRAFT

- Flexible multilayer allograft
- Derived from the amnion and chorion layers of the placental membrane
- Approximately 4X thicker than traditional single layer amnion
- Improved handling and increased workability

*Providing mechanical protection*



**The MIAMNION® product line offers three different thicknesses for increased versatility for a variety of physician preferences.**

Product HCPCS Code: Q4100 (Skin Substitute) per square centimeter

MIAMNION® Single Layer		MIAMNION® Dual Layer		MIAMNION® Matrix	
SIZE	CODE	SIZE	CODE	SIZE	CODE
10x10 cm	MIA101000S	7x15 cm	MIA071500S	10x11 cm	MIA101100S

1. Rowlatt, U. (1979). Intrauterine wound healing in a 20-week human fetus. Virchows Arch A Pathol Anat Histol, 381(3), 353-361.

