

Utilizing Cryopreserved Human Amniotic Suspension Allograft (CASA) and Dehydrated Human Amniotic Membrane Allograft (DAMA) in the Veteran population to reduce the incidence of amputation.

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PURPOSE/INTRODUCTION

- Diabetes mellitus type 2 impacts the lives of one in four Veterans and a 10- to 20-fold increased risk of lower-limb amputation. ² In 2010, the economic burden of among Veteran clients requiring lower limb amputation was more than \$206 million² not to mention the physical, mental and emotional impact to the Veteran. Cryopreserved Human Amniotic Liquid Allograft and Dehydrated Human Amniotic Membrane Allograft can speed healing of lower extremity wounds by stimulating essential natural proteins, cytokines and growth factors.

METHODS

- Four patient cases were reviewed to illustrate the effectiveness of CASA and DAMA for lower extremity wounds that had the potential to digress to amputation. Two of the four patients were recommended amputation but opted advanced wound care. All wounds were initially treated with standard dressings and offloading. Two patients were treated with DAMA with closure of both wounds. The other two patients received a combination of CASA and DAMA to complete closure of both wounds. There were no reported side-effects from any patient.

CASE REPORT

- Patient 1 was initially treated “for years” per patient by Podiatry with callous paring without resolution of left foot sub-met wound. The patient was initially treated in the Clinic with Total Contact Casting (TCC) and topical treatment resulting in complete closure of the wound. Patient returned 5 months later with reopened wound. The patient was treated with 2 DAMA applications in a 5 week time period resulting in complete closure of the wound.
- Patient 2 was referred to Clinic after amputation was recommended of the left foot by Vascular. He wanted to try to save his foot. The patient was initially treated in the Clinic with CS debridement when other multiple medical issues arose. 2 applications of DAMA resulted in complete closure of the wound. Pt. continues to be healed today.
- Patient 3 was initially treated for almost a year with topical treatments. Amputation of left foot recommended by Vascular. The patient was initially treated in the Clinic with Total Contact Casting (TCC) and topical treatment. CASA was added for 4 applications from 03/18/16 – 04/22/16 when DAMA was added in conjunction with CASA. Multiple medical issues arose during course of treatment. Total 12 DAMA applications in conjunction with 12 CASA injections resulting in complete closure of the wound.
- Patient 4 was initially treated with for 3 months with topical treatments. At same time received diagnosis of cancer and started chemo. Began DAMA application 01/12/17. Had 3 applications, had some health issues so no applications for 2 months. Added CASA 07/21/17. Received total 11 DAMA applications and 2 CASA injections resulting in complete closure of the wound.

DISCUSSION

- CASA and DAMA was utilized to closure on four lower extremity wounds with time to healing averaging 25 weeks without the need for amputation or other adjunctive therapies and without reported side-effects.

CONCLUSION

- CASA and DAMA expedites healing rates in the patient with hard to heal lower extremity wounds at risk for amputation; therefore, reducing cost of care, and improving quality of life in the Veteran population.

REFERENCES

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*This work was supported by resources provided by the North Florida/South Georgia Veterans Health System, Gainesville, FL.

Patient #	Date	Measurement	% decrease	# CASA injections	Weeks since first injection	# DAMA placements	Weeks since first DAMA
1	06/04/15	3.0cm round x 3.0cm	Initial	0	N/A	0	N/A
	07/01/15	Resolved	100%	0	N/A	0	N/A
	12/18/15	0.7cm x 0.6cm x 0.2cm	Reopened wound	0	N/A	Initial	N/A
	01/22/16	Resolved	100%	0	N/A	2	5
2	04/07/16	2.4cm x 0.4cm x 0.2cm	N/A	0	0	Initial	N/A
	05/26/16	Resolved	100%	0	0	2	7
3	09/08/15	7cm x 4cm x 1.0cm	Just prior to initial visit	0	N/A	0	0
	05/13/16	3.0cm x 2.2cm x 0.2cm	76%	6	8	2	3
	12/20/16	Resolved	100%	12	38	12	33
4	09/21/16	1.0cm round x 0.3cm	Initial	0	N/A	0	N/A
	07/28/17	0.6cm x 0.3cm x <0.1cm	82%	1	1	11	27

SAI – SACi/SAI x 100 == _____% reduction
*SAI= surface area (LxW) on admission,
SAC = surface area currently