

Against All Odds

presenting a patient centered wholeness approach involving a morbidly obese patient with B/L post upper leg pressure ulcers



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Introduction

The management of pressure ulcers affecting morbidly obese patients who are bed-chair bound is a challenging scenario that requires multiple levels of care to aid in wound healing. Patients frequently present with different conditions slowing their wound healing down significantly. These include urinary incontinence, Irritable Bowel Syndrome, diarrhea, excess moisture leading to fungal and bacterial overgrowth within the adipose folds, difficulty moving and positioning due to weight, along with multiple comorbidities such as restrictive lung disease, obstructive sleep apnea, congestive heart failure, and fatty liver disease to list a few. These challenges prolong wound healing for years on many occasions.

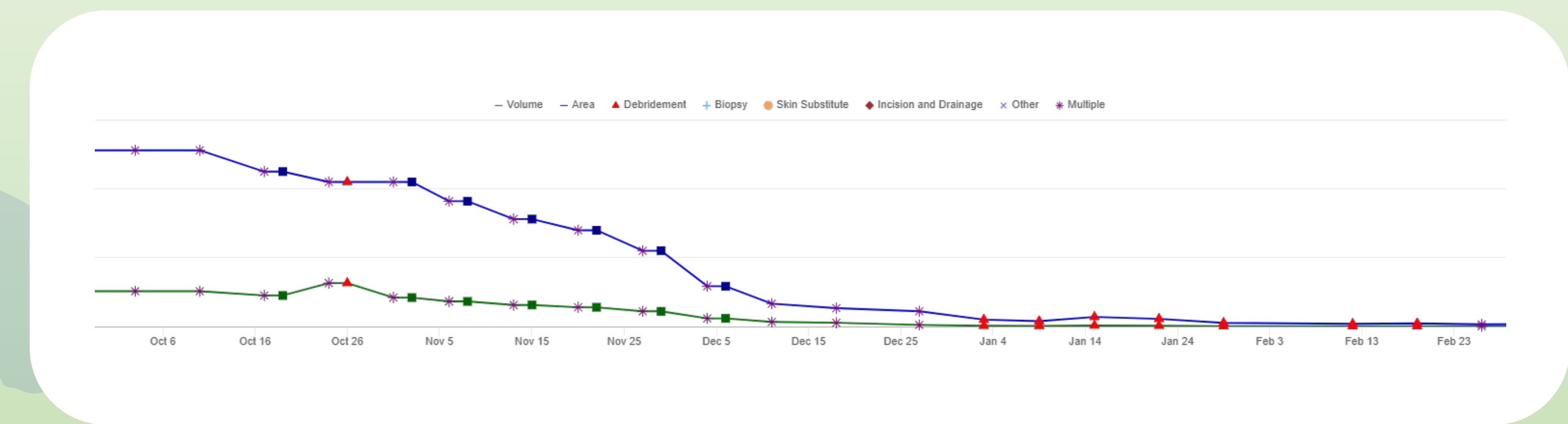
The particular patient in this case study was a 61 year old female. Some of her comorbidities include morbid obesity, congestive heart failure, and mental health issues. Due to these conditions, she is wheelchair and bed-bound, which led to many of her wounds. The patient also had monetary and food security issues which further led to the constant state of non-healing wounds.

Methods

With this patient, we controlled every possible condition that was directly associated with her wound healing. To name a few: offloading, nutritional status including supplements such as protein, vitamin D, and collagen peptides, infection management, incontinence, advanced wound therapy including a dual-layered dehydrated human amnion membrane (dHAM) comprised primarily of connective tissue. It preserves the natural growth factors and cytokines normally present in amniotic tissue. The connective tissue and associated factors allow the soft tissue to regenerate, promote granulation and wound closing. Most importantly we focused on the patient's emotional well-being to provide a calm reassuring atmosphere during each visit.

Results

After underlying comorbidities and conditions (Standard Wound Care) were addressed with no significant signs of healing, we started advanced modalities, including allograft applications. During her follow-up appointments, we were always discussing in her plan of care and some of the best options for her to be involved with managing her chronic wounds. Some of the patient engagement involvements including why she needed to not sit in her chair all day or choosing to even sleep in her wheelchair. This behavior stems from her concerns regarding transferring to her bed, as she fears falling due to her weakened state. In addition, she has expressed financial constraints which have resulted in her inability to afford food until the arrival of her food stamps. The attending home health aide has corroborated this information, acknowledging her own provision of food for the patient in light of her current financial circumstances. Through efforts of everyone including home care and the caregiver, we were able to provide resources to the patient. These ulcers that had been there for over 5 years, are now 95% healed.



Discussion

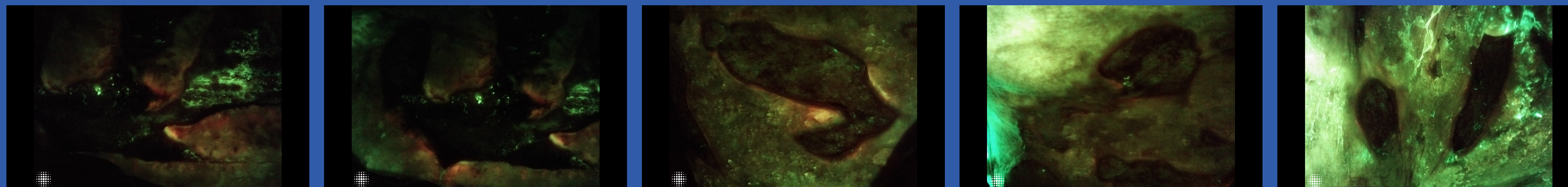
The aim of this case presentation is to highlight the "kitchen sink" approach in these very challenging cases and scenarios. Advanced technologies and therapies included negative pressure wound therapy, vibrating mechanical debridement, and fluorescence imaging to monitor and guide the provider to develop a plan of care for managing the high level of bacteria load. The vibrating mechanical debridement tool (VMDT) was especially useful because the patient did not respond well to traditional debridement methods. Used in conjunction with the fluorescence imaging, we were able to properly clean the wounds and safely disrupt biofilm.

The provider obtained before and after fluorescence imaging to develop a plan of care. Before images reflected (+) red fluorescence indicating bacterial loads greater than 10.4 which may indicate bioburdens at risk for infection. Post VMDT scrubbing was used to cleanse wounds and safely disrupt biofilm/bioburdens, post images reflected (-) fluorescence representing negative or below the threshold of the bacteria loads at risk for infection. This imaging helps by giving the provider "real-time" assessment to make medical decisions in the moment to proceed forward with Cellular, Acellular and Matrix-Like Products (CAMPS).

For morbidly obese patients, especially with a BMI>50, simple movements are difficult. The healing rates of pressure injuries/ulcers in patients of this size who are bed bound is challenging due to all of the other factors including Mental Health & patient empowerment and engagement. With the array of other factors that come into play, as an advanced wound company we addressed all possible factors that would aid in her wound healing. The patient's mental health has improved as well.

References

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