

The Utility of Transforming Powder Dressing in the Treatment of Various Wound Types: A Case Series

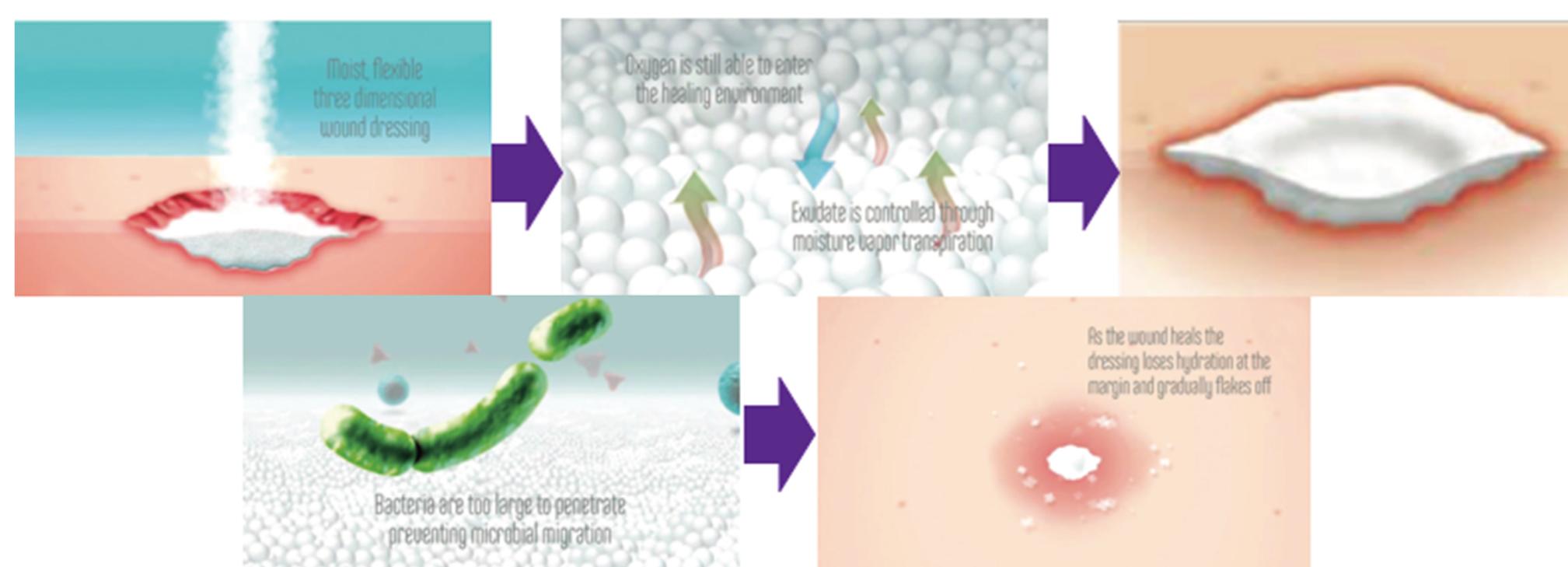
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INTRODUCTION:

More than 8 million people a year receive wound treatment in the U.S. Increasing health care costs, limited healthcare resources, an aging population, and life-style related diseases make wound management a growing clinical, social, and economic burden, indicating a vital need for a more effective wound management solution.

Transforming powder dressing (TPD*) forms a non-occlusive barrier which helps maintain a moist environment while facilitating the flow of excess exudate via vapor transpiration.



METHODOLOGY & MATERIALS:

- TPD is a novel, biocompatible polymer powder dressing which transforms into an extended-wear gel matrix upon hydration
- Single-center retrospective case series of various acute and chronic wounds treated with TPD
- 50 patients with 50 wounds were treated with TPD and had at least one follow-up visit during the study period

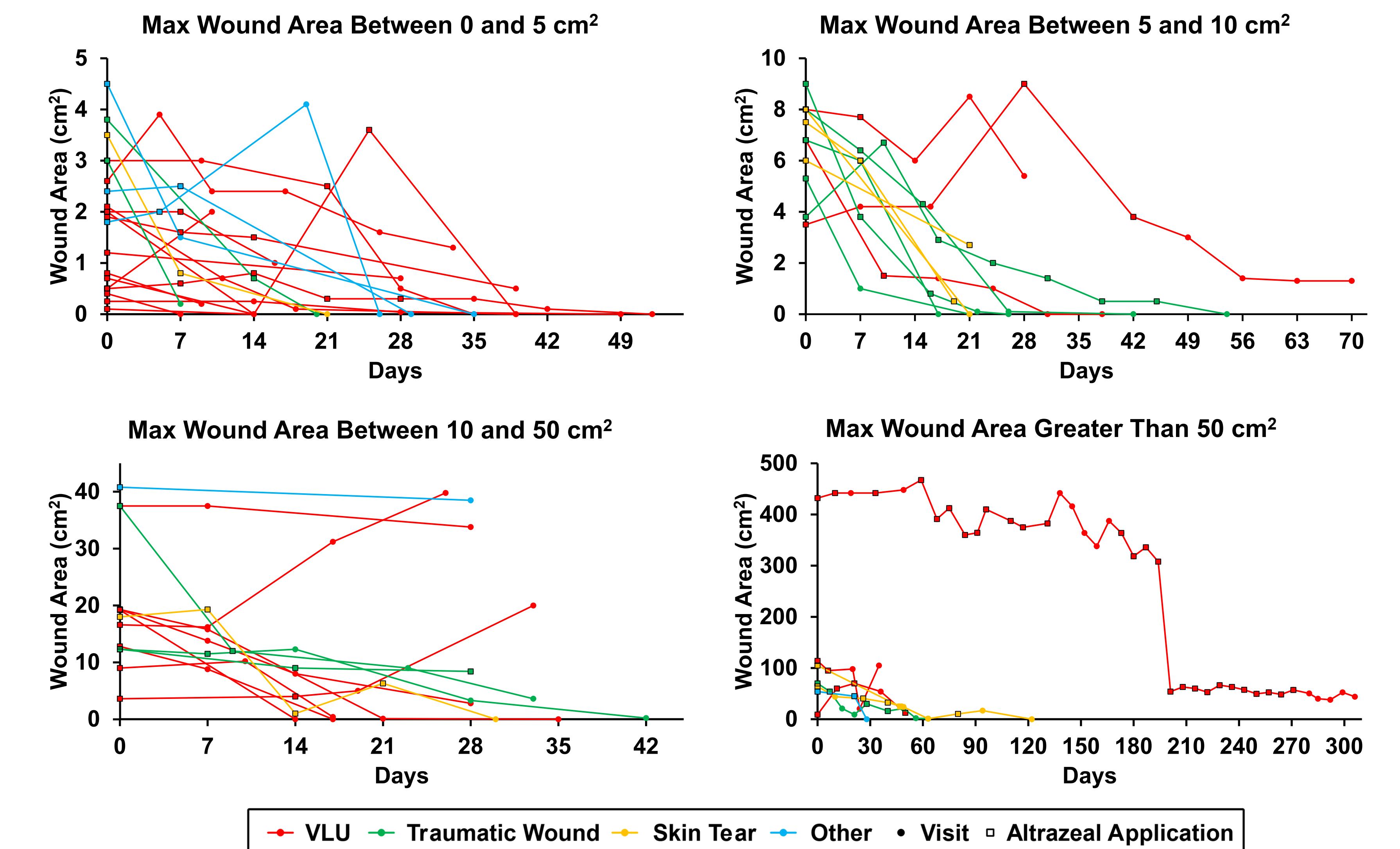
SUMMARY OF DEMOGRAPHICS

Number of subjects	50
Number of TPD applications	129
Mean age (range)	76 years (18-99)
Male to female participants	20 (40%) / 30 (60%)
Number of current smokers	3 (6%)
Number of previous smokers	25 (50%)
Mean number of comorbidities (range)	6 (0-15)

RESULTS:

SUMMARY OF WOUND HEALING				
WOUND TYPE	TOTAL NUMBER	MEAN NUMBER OF TPD APPLICATIONS	NUMBER WITH WOUND HEALING > 10% PER WEEK**	NUMBER HEALED
Venous Leg Ulcer	27 (54%)	2.8	17 (63%)	12 (44%)
Traumatic Wound	11 (22%)	2.5	10 (91%)	6 (55%)
Skin Tear	7 (14%)	2.6	5 (71%)	5 (71%)
Other (Surgical, Arterial, Diabetic)	5 (10%)	1.6	4 (80%)	4 (80%)
TOTAL COUNT / MEAN	50	2.6	36 (72%)	27 (54%)

** Based on average healing per week from baseline to last visit



REFERENCES & ACKNOWLEDGEMENTS: Sen CK. Human Wound and Its Burden: Updated 2020 Compendium of Estimates. Adv Wound Care (New Rochelle). 2021;10(5):281-292 | Obagi Z DG, Grada A, Falanga V. Principles of Wound Dressings: A Review. Surg Technol Int. 2019;10(35):50-57 | Assadian O, Arnoldo B, Purdue G, et al. A prospective, randomized study of a novel transforming methacrylate dressing compared with a silver-containing sodium carboxymethylcellulose dressing on partial-thickness skin graft donor sites in burn patients. Int Wound J. 2015;12(3):351-356. | Acknowledgments: The study was conducted independently by NYU and no compensation was paid to the authors. This poster was presented in collaboration with ULURU Inc. For application instructions and risks of this device refer to Altrazeal Instructions for Use. | Contact: Scott.Gorenstein@nyulangone.org

ILLUSTRATIVE CASES:

Case 1: Venous Ulcer



Case 2: Trauma | Skin Tear



DISCUSSION:

Wound area reduction and positive healing trajectories were observed in nearly all wounds regardless of etiology. Complete healing was achieved in 54% of all wounds with 2.6 mean TPD applications. No TPD related adverse events were recorded.

Chronic Wounds: Complete healing was achieved in 44% of VLU treated with TPD and compression with 2.8x applications on average. TPD was ideal for venous leg ulcers because of its absorptive property and ability to conform and adhere to challenging locations.

Acute Wounds: 61% traumatic and skin tear wounds healed completely with 2.5x applications on average.

We conclude that TPD is a safe and effective way to treat acute and chronic wounds of various etiologies and locations.