

# A Novel Mechanism for Debriding Wounds Intolerant to Sharps Debridement, and Establishing Equity of Successful Wound Debridement for Rural Patients with a Highly Charged Fiber Dressing (HCF Dressing)\*

Richard Schneider MSN/MBA AGACNP-BC CWON

## INTRODUCTION

Patients may suffer from wounds that are not amenable to sharp debridement such as wounds with pyoderma gangrenosum. The author used a new dressing that supports debridement of slough to test whether it was a reasonable alternative in removing at least some of the necrotic/slough burden from the wound. This new dressing works to remove slough via the deployment of highly dense negative charges that electrostatically seem to adhere to slough, aiding its removal during dressing changes. This is why this dressing is generically called Highly Charged Fiber.

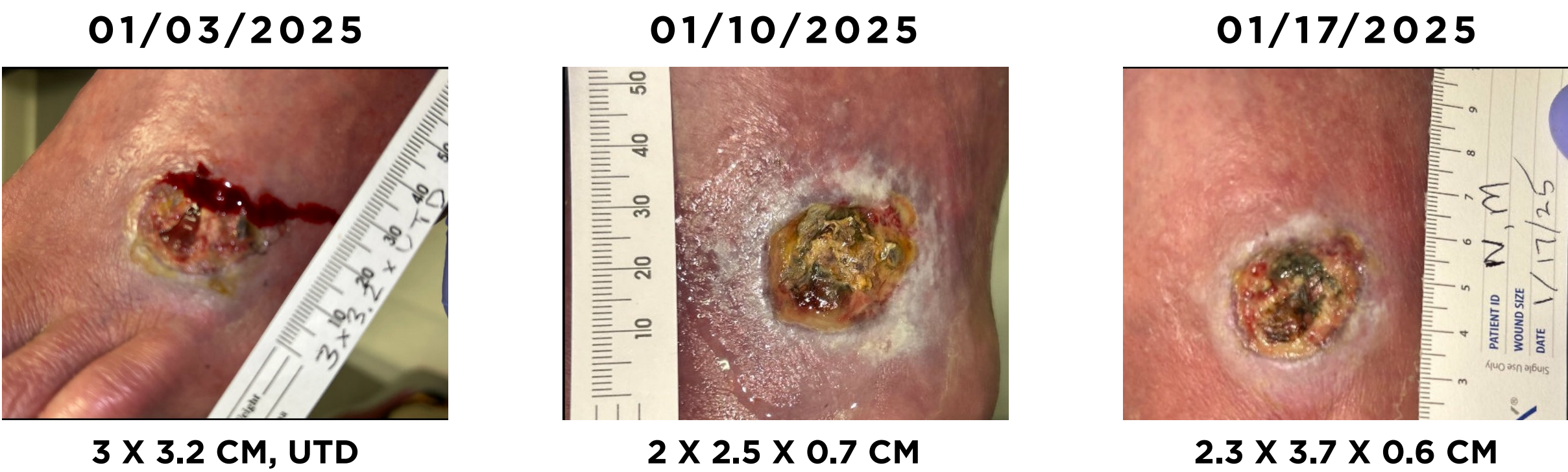
## METHODS

Methods: We chose a convenience samples of patients for who sharp or other methods of debridement was difficult to achieve. Pure Hypochlorous Acid (pHA)\*\* cleanser was used during dressing changes, to augment HCF use, when available at the treatment site and such use is noted where applicable.

- a. For patients who are intolerant of sharps debridement, they were treated with the Highly Charged Fiber (HCF) dressings every 48 hours. Dressing was applied in clinic 1 x week, ordered from DME provider, and used at home every 48 – 72 hours based on drainage amount.
- b. For patients unable to drive or make frequent appointments with provider for debridement or with no access to provider, but who did have insurance, dressings ordered from Durable Medical Equipment provider (DME) and patient or caregiver performed dressing changes.

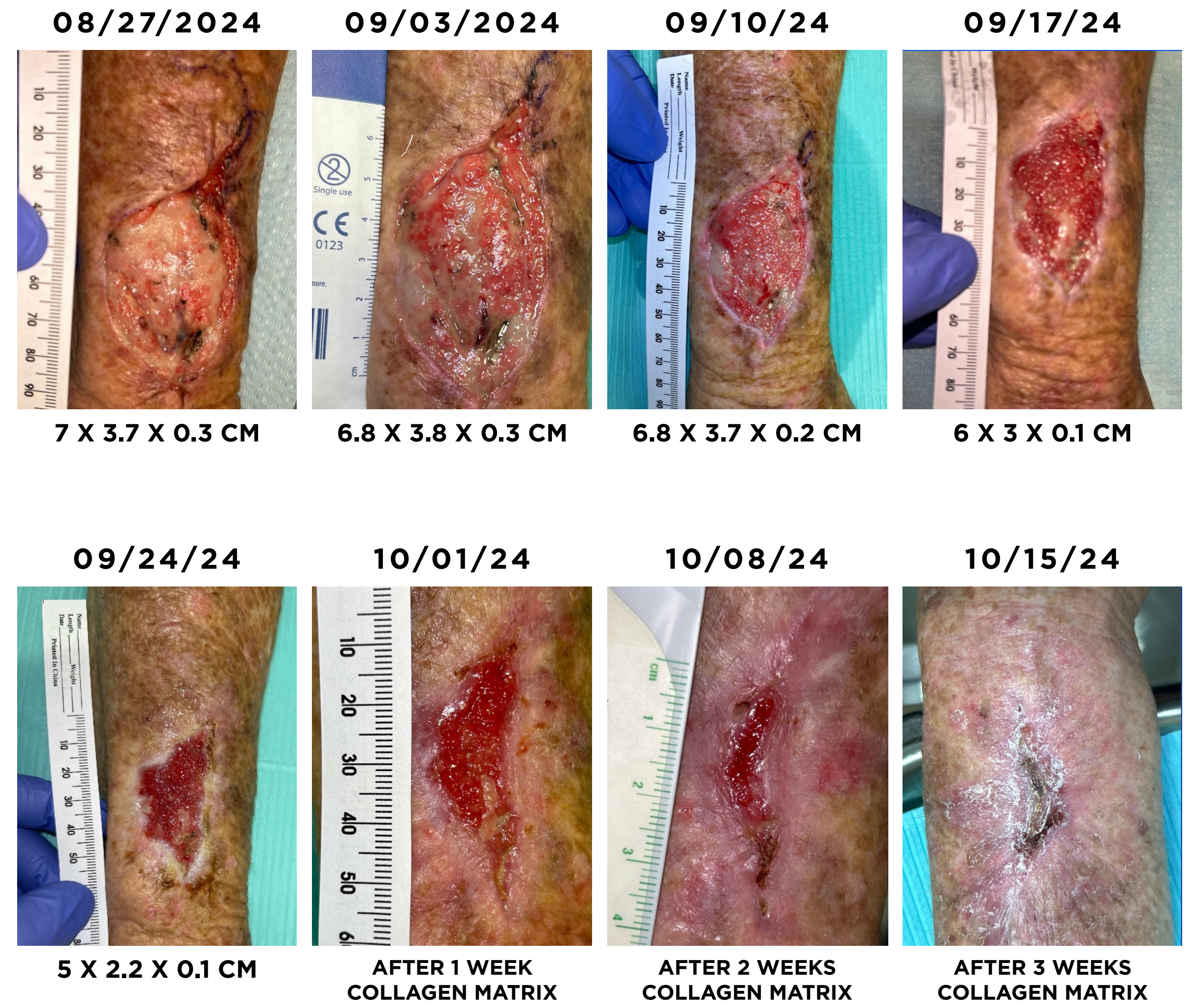
## CASE 1 FIGURES 1 A-F

77 yo male PMH of polycythemia in the context of testosterone use. Patient slipped and shoved foot into cabinet resulting in edema, ecchymosis, and laceration of dorsal left foot. Wound 100% slough at 1st visit. After 6 weeks HCF 100% desloughed.



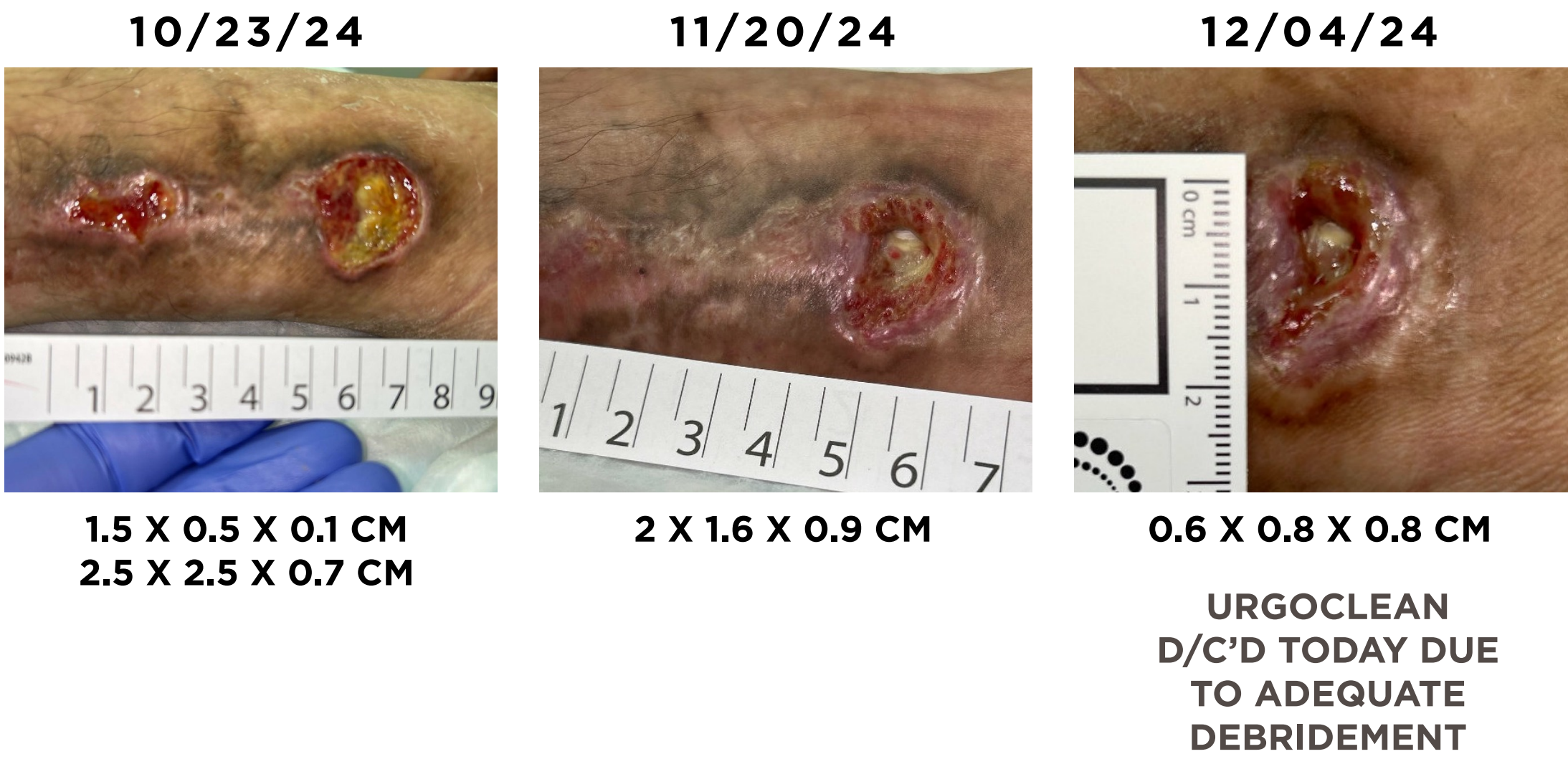
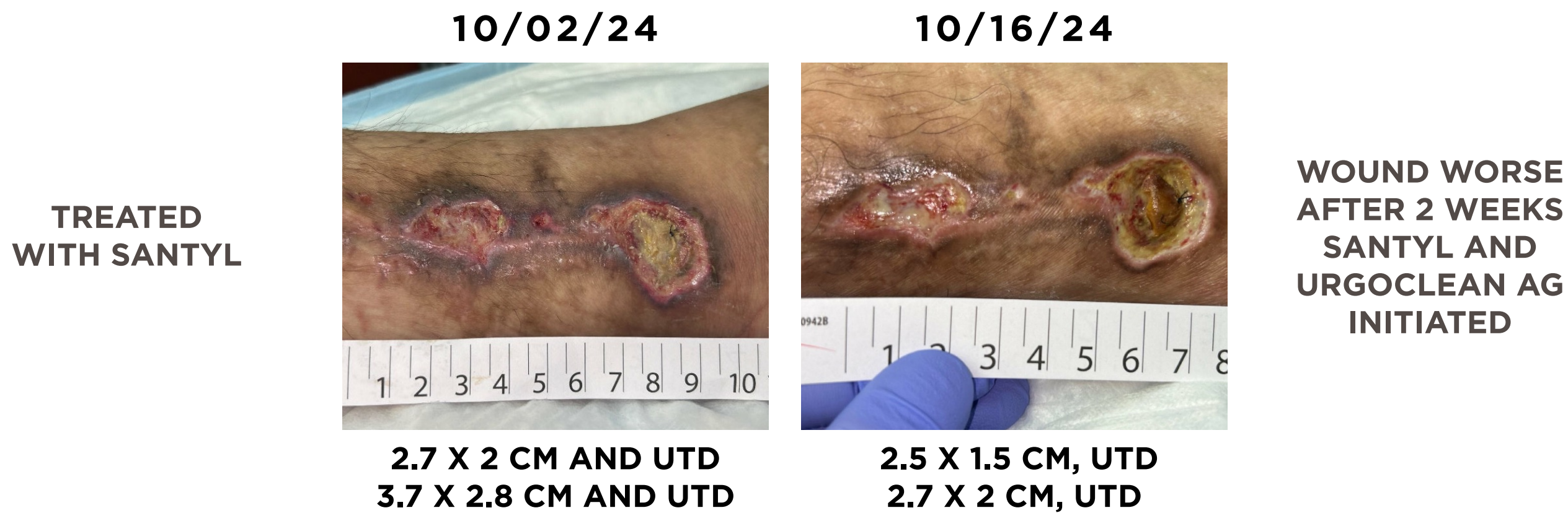
## CASE 2 FIGURES 2 A-H

68 yo female, Right forearm squamous cell carcinoma, IBS, Smoker unwilling to stop, poor nutritional intake. 100% slough at 1st visit. After 5 weeks HCF wound 100% desloughed.



## CASE 3 FIGURES 3 A-E

30 yo female incomplete quadriplegic. Pyoderma Gangrenosum of wound on RLE. Developed fibular osteo, fibulectomy with closure that dehiscd and developed slough. Unable to use sharps debridement and used HCF after enzymatic treatment ineffective. After 7 weeks HCF 100% desloughed.



## RESULTS

A variety of wounds were successfully treated:

- i. L Foot trauma wound desloughed/debrided **FIGURES 1 A-F**
- ii. R forearm wound s/p resection of squamous cell carcinoma successfully desloughed/debrided and healed: **FIGURES 2 A-H**
- iii. RLE Pyoderma Gangrenosum wound with slough recalcitrant to sharps debridement was successfully desloughed/debrided. **FIGURES 3 A-E**

## CONCLUSION

- c. Payor coverage makes it easy to use this HCF dressing on patients in general in a highly affordable and painless way for the patient.
- d. Patients living in rural areas with limited access to provider can have wounds cleansed and debrided and health equity is achieved.
- e. Pyoderma Gangrenosum wounds prohibited from sharps can be desloughed along with carcinoma resection wounds and also trauma wounds.

## REFERENCES

1. UrgoClean Ag, data on file, 2014
2. Desroche N., et al., Characterization of the antimicrobial spectrum and anti-biofilm activity of a new silver-containing dressing with poly-absorbent fibres and antimicrobial silver matrix. Poster EWMA 2016.
3. Dalac S., Sigal L., Addala A., et al Clinical evaluation of a dressing with poly-absorbent fibres and a silver matrix for managing chronic wounds at risk of infection: a non comparative trial. J Wound Care, Vol 25, No 9, September 2016
4. Lazareth, I., Meaume, S., Sigal-Grinberg M. et al. The role of a silver releasing lipido-colloid contact layer in venous leg ulcers presenting inflammatory signs suggesting heavy bacterial colonisation: results of a randomised controlled study. Wounds 2008; 20: 6, 158-166.

\*Urgoclean Ag, Urgo Medical North America

\*\*pure Hypochlorous Acid (pHA): Vashe Wound Solution, Urgo Medical North America