

# Revisiting A Novel Therapy In Wound Management

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## Introduction

Antibiotic resistance has been increasing tremendously in the past decade. Various multi drug resistant organisms are being isolated and this has posed a huge problem in the management of chronic complex wounds. Biofilm also plays a big role in preventing wound closure. New types of advanced dressings are required to manage the bioburden. Therefore, dressings with compounds which have no resistance is the best to deal with this phenomenon of drug resistance organisms. In addition, synergistic compounds with different methods of action work better. In this case series, a new novel therapy with compounds such as gentian violet, methylene blue, silver and surfactant which was impregnated into a foam was utilized.

## Methodology

A total of 7 patients with 10 wounds were chosen by convenience sampling constituting a case series. There were 3 venous ulcers and 3 diabetic foot ulcers and 1 case of wound dehiscence. All the cases were infected with reference to the Principles of Best Practice (WUWHS) on Infection. The Triangle of Wound Assessment was used to assess the wounds. The wounds were cleansed with distilled water and then debrided at the Wound Clinic and the Retro Tech Dressing (RTD) was applied every 48 to 72 hours.

## Result

All the wounds showed remarkable wound closure in terms of size. Infection was arrested and the most convincing was the healing of a 25 year old venous ulcer which was referred to us from another specialist clinic as it has stagnated and worsened during the cause.

## Conclusion

In conclusion, the methylene blue, gentian violet and the silver in the Retro Tec Dressing managed the infection in the wound bed. In addition, the moisture was managed with the foam which was impregnated with the above compounds. The surfactant also helped in reducing the surface tension of the wound. All the compounds worked synergistically to help close the wound. Therefore, it is a good dressing to be added in our armament.

## References

- Incorporating A New Highly Absorbent Antimicrobial Polyurethane Foam\* in A Multimodal High Risk Diabetic Wound Care Algorithm. Dr. Karen Brooks, DPM & Mr. Michael Olden, H.T. OST, C-PED, PMAC, NAWCC of Pedorthoclinics Kerryville Division - South Texas Veterans Health Care Systems.
- A Novel Polyurethane Foam Wound Care Dressing with Silver, Methylene Blue and Gentian Violet: Confirming The Present of Singlet Oxygen Generation and Antimicrobial Activity. Dr. Gordon A Wood, Mariusz Knap (Keneric Healthcare, Irving Texas).
- Use of New Foam Wound Dressing in Combination with a Negative Pressure Wound Therapy Device. William Tettelbach, MD, FACP and Diana Smith\*, MSN, GNP.
- The Addition of Silver to Methylene Blue and Gentian Violet: Antimicrobial Benefits of a Polyurethane Foam Wound Care Dressing. Dr. Jean Achterberg, DC and Mariusz Knap (Keneric Healthcare, Irving Texas).
- Treatment of a Complex Diabetic Foot Wound with RTD® Wound Dressing: A Unique Absorbent Antimicrobial Polyurethane Foam Dressing. Dr. Belinda Marcus, MD, FACEP, CWS, Medical Director, North Fulton Hospital, Roswell, GA and Kathy Kaufman, LPN, CHT, Wound Care Nurse, HyperbaRXs at Northside Forsyth, Cumming, GA.
- Uses of A Novel New Absorbent Antimicrobial Polyurethane Foam Wound Dressing. Dr. Belinda Marcus, MD, FACEP, CWS, Medical Director and Kathy Kaufman, LPN, CHT, Wound Care Nurse, HyperbaRXs at Northside Forsyth, Atlanta, GA.

**Case 1a - 58 years old Female  
25 years old wound  
Venous Ulcer**



5.5.16 17.5.16 (372 days)

**Case 1b - 58 years old Female  
25 years old  
Venous Ulcer**



5.5.16 17.5.16 (372 days)

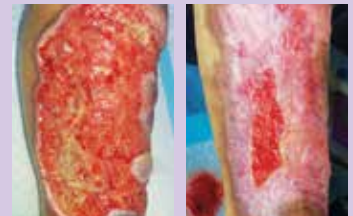
**Case 2a - 50 years old female  
2.5 months old wound  
Diabetic Foot Ulcer**



14.7.16 17.10.16 (95 days)

Last Pic as patient was diagnosed with cancer of cervix. Patient Passed away.

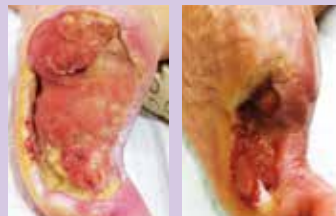
**Case 2b - 50 years old female  
2.5 months old wound  
Diabetic Foot Ulcer**



14.7.16 17.10.16 (95 days)

Last Pic as patient was diagnosed with cancer of cervix. Patient Passed away.

**Case 3 - 72 years old female  
2 months old wound  
Diabetic Foot Ulcer**



Before After 89 days

**Case 4 - 60 years old male  
2.5 years old wound  
Venous Ulcer**



Before After 115 days After 183 days

**Case 5 - 59 Years Old Female  
15 years old wound  
Diabetic Foot Ulcer**



Before After 91 days

**Case 6a - 45 years old male  
1 month old wound  
Diabetic Foot Ulcer**



13.4.17 After 70 days

**Case 6b - 45 years old male  
1 month old wound  
Diabetic Foot Ulcer**



Before After 70 days

**Case 7 - 55 years old male  
4.5 months old wound  
Wound Dehiscence**



Before After 151 days