

# CASE STUDY TO SHOW THE EFFECTS OF A PHMB AND BETAINES CONTAINING VISCOUS WOUND GEL\*<sup>1</sup> ON A CHRONIC NON HEALING AMPUTATION SITE

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## Introduction

An 80 year old male, Type 2 diabetes (12 years) on Insulin presented to podiatry clinic with a painful and inflamed wound Nov 2011. Previous acute infection in the right 1st toe had required emergency amputation March 2011. The right 2nd and 3rd toes were amputated 3 months later due to deterioration and persistent infection which recurred despite repeated courses of antibiotics in consultation with microbiology. The wound remained non healing 5 months later. Angiography had revealed non-reconstructable vascular disease (Fig 1).



Fig 1

## Method

The foot was offloaded following the initial surgery by a total contact moulded inlay (TCI). This was continued throughout the treatment. The patient lives in a care home for the elderly, is largely immobile and travels to hospital appointments by ambulance in his own wheelchair.

As clinic appointment time was limited, the wound was soaked for 5 minutes in a PHMB and Betaine containing solution\*<sup>2</sup>. The wound was too painful to sharp debride so following the soak it was dressed with silicone coated foam dressing and the PHMB and Betaine containing wound gel\*<sup>1</sup>. The dressing was secured by fleecy and crepe bandaging and the patient was still able to wear his TCI. The PHMB and Betaine containing wound gel was supplied with instructions for use by the community nursing team for the subsequent 3 weeks as the patient finds attending clinic difficult and tiring.

## Result

The patient attended podiatry clinic 3 weeks later. The wound appearance had improved markedly with minimal slough in the wound bed (Fig 2). The surrounding erythema had reduced and the patient reported little pain for the past 2 weeks. There had been no sharp debridement. Antibiotic therapy had not been required. Blood tests revealed that the patient was anaemic and iron treatment was initiated.



Fig 2

## Conclusion

The wound which had been showing little or no progress for the preceding 5 months had improved visibly within the first 3 weeks of topical treatment. The patient expressed relief in the reduction of pain. Further antibiotic therapy had been avoided.

The PHMB and Betaine containing wound gel was used until the end of its shelf life by which time the wound had virtually healed and standard sterile foam dressing was applied. This made it a very cost effective therapy. At the last appointment the last, small area of the wound was covered with new epithelial tissue (Fig 3).



Fig 3

## References

- \*1 B. Braun Medical - Prontosan® Wound Gel X
- \*2 B. Braun Medical - Prontosan® Solution