

## Non-healing amputation wound

Author: Lin You Cheng



### HISTORY

76-year-old man presented with a 6-month, non-healing post amputation wound of the 2nd and 3rd toe. He had initially undergone amputation of his 2nd toe 12-month prior due to gangrene, 6 months later he then

underwent further surgery to amputate his 3rd toe due to ongoing issues. Past medical history includes type 2 diabetes mellitus, peripheral arterial disease, and end stage renal failure.



### PREVIOUS MANAGEMENT

Prior to referral the patient had been receiving standard of care which included regularly sharp debridement, appropriate wound dressings, and antibiotics, as necessary. The referral hospital had noted little or no improvement in the wound during the last 6 months. On presentation the wound bed was dusky with no active signs of granulation, the wound edge was rolled with significant callus. There were

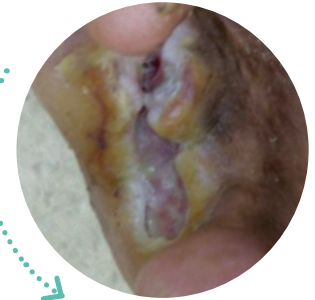
no obvious signs of infection, however the dressing regimes had included silver alginate dressing and antibacterial cream. Arterial duplex scan revealed significant bilateral peripheral arterial disease in the lower limbs. Transcutaneous oxygen pressure over the dorsal midfoot was found to be 27mmHg. Bilateral lower limb revascularisation was performed with percutaneous transluminal angioplasty.



### NATROX<sup>®</sup> OXYGEN WOUND THERAPY

Due to the underlying medical history and previous wound complications it was decided to initiate NATROX<sup>®</sup> Oxygen Wound Therapy to increase the speed and likelihood of healing. Prior to application the wound was sharp debrided. The NATROX<sup>®</sup> Oxygen delivery system (ODS) was placed directly on the wound bed and covered with a non-adherent foam dressing and secured with a

bandage. Dressing changes and wound review were carried out weekly. By week 2 the wound had reduced significantly in size and the wound edge appeared healthier. By Week 5 the wound had again reduced in size and the wound bed consisted of 100% healthy granulation tissue. By week 8 the wound was completely closed with minimum wound scarring.



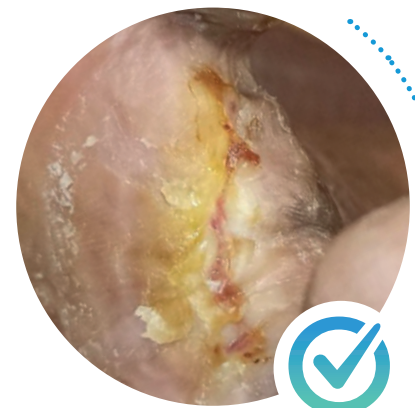
Initial presentation



2 weeks of NATROX<sup>®</sup> therapy  
63% reduction in wound size

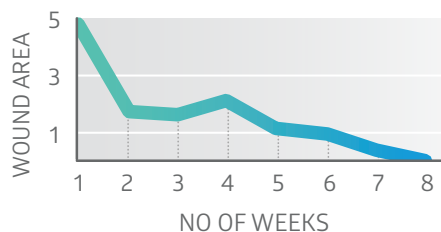


5 weeks of NATROX<sup>®</sup> therapy  
33% reduction in wound size



Complete wound closure following 8 weeks of NATROX<sup>®</sup>

Commenced NATROX<sup>®</sup>



### CONCLUSION

Tissue oxygenation plays an important role in wound healing and clearly due to this patient poor tissue perfusion wound healing had stalled. NATROX<sup>®</sup> Oxygen Wound Therapy helped to stimulate the wound bed thus promoting wound healing. Complete

wound healing was achieved in just 8 weeks. The device proved simple for the patient to manage at home and was well tolerated. These results suggest that NATROX<sup>®</sup> has a promising role in the management of the vascular-compromised foot.

# How to enhance clinical outcomes through increased patient engagement<sup>1</sup>

## ENCOURAGE CONCORDANCE

Management options that reduce the impact on patient lifestyle can improve concordance

## PROMOTE EMPOWERMENT

Ensuring that therapy strategies reduce wound symptoms and increase patient well-being

## ENDORSE INVOLVEMENT

Encouraging patient participation and engagement in their own wound care whenever possible

### How can NATROX® help?

## Patient Benefits of NATROX® Oxygen Wound Therapy



To find out more

Call: +44 (0)1223 661830 or email: [info@natroxwoundcare.com](mailto:info@natroxwoundcare.com)

[www.natroxwoundcare.com](http://www.natroxwoundcare.com)

1. Wounds UK (2018), Consensus round table meeting: Portable topical oxygen therapy for healing complex wounds.

