

The use of Topical Wound Oxygen (TWO₂) on Complex Recalcitrant Wounds in Multi-Morbid Patients

Authors: Dr. Bruce Levine¹, Dr. Christian Frye² ¹ Harbor Foot and Ankle, San Pedro, CA ² AOTI Ltd, Galway, Ireland

Introduction

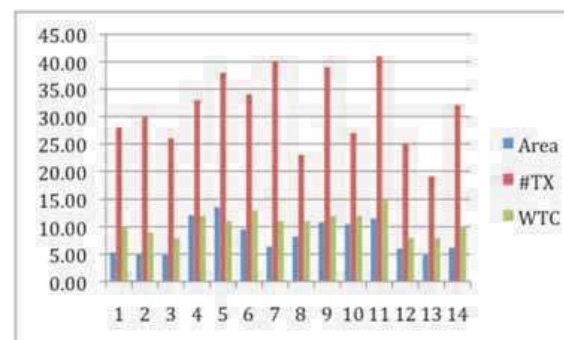
Patients suffering from chronic wounds often have multiple chronic conditions that impair wound healing.

Methods and Results

Topical Wound Oxygen (TWO₂), manufactured by AOTI Ltd, Ireland works by delivering 100% oxygen at pressure cycles between 5 and 50mbar to enhance the partial oxygen pressure in the wound tissue. We have treated approximately 50 patients with a new therapy working with topical pressurized oxygen, and present data on 14 ulcers from 10 patients: 11 DFU and 3 Venous Stasis which had been unresponsive to conventional wound care and/or NPWT.



Patients received current standard best practice wound care techniques including infection control, debridement, offloading or compression therapy plus the addition of Topical Pressurized Oxygen therapy. 8/10 patients had history of Renal Disease, 4/10 had history of PVD and 8/10 were chronic smokers.



Results

10/10 patients achieved closure on 14 previously non-responsive ulcers. Wound are averaged 8.8 cm² (4.8-13.6) with average time to closure being 11.5 weeks (8-15) and average number of treatments to closure at 33 (19-41).

Conclusion

In these 10 extremely complicated cases, all associated with multiple co-morbidities, the addition of TWO₂ proved to be a valuable adjunctive therapy with good results in healing their recalcitrant wounds and more importantly, the maintenance of the patients' functional status.