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Abstract No :
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AIM

- This study aims to evaluate the efficacy of topical oxygen therapy in managing hard-to-heal chronic wounds.
- Chronic wounds which are often resistant to conventional treatments, pose a significant challenge due to their prolonged healing times and risk of complications.
- The study seeks to assess how topical oxygen therapy can enhance wound healing.

METHOD

A serial case study was conducted involving eight patient with chronic wound

DIAGNOSTIC PROCESS

- Each case had detailed history taking , physical examination , laboratory investigation and imaging for diagnosis and management.



STANDARD OF CARE

- on communicable disease control , nutritional advice , offloading and dressing.
- TIME framework and Triangle of wound assestment (TOWA) used in managing the wound .

ADVANCED DRESSING

- Topical oxygen therapy was counselled and applied for these patient upon gaining consent from patient .

DATA COLLECTION

- Pre and post treatment photography were taken to document wound progression and wound size was measured to analyze the closure.

RESULTS

- All the patient showed improvement in the wound progress within two week of initiating topical oxygen therapy with 10-20% improvement in previously non progressive wound.Out of this 4 patient attained full closure . Case no 8 is approaching closure. Patient 2 unfortunately passed away due to sepsis from another wound . Patient 6 and 7 stopped therapy due to financial constraint. Patient who were afraid to ambulate felt more comfortable with the therapy and improved blood circulation .As a result patient were more receptive to counselling and managing other factors such as non communicable disease, nutrition and physiotherapy.

06.1.23 CASE 1

6.7.23

8.2.24

16.3.23 CASE 2

31.5.23

26.7.23



9.5.24 CASE 3

13.6.24

7.2.24 CASE 4

5.4.24

16.1.24 CASE 5

22.1.24

24.9.24



9.2.23 CASE 6

16.6.23

9.12.23

9.8.23 CASE 7

29.12.23

7.8.24 CASE 8

24.9.24



CONCLUSION

REFERENCE

- 1.Tjun, T.Y. et al. An observational clinical trial examining the effect of topical ... Available at: <https://journals.sagepub.com/doi/full/10.1177/15347346211053694> (Accessed: 19 August 2024).
- 2.Tabanjeh, S.F. et al. (1970) Management of diabetic foot ulcers using topical oxygen therapy: A case series, Latest TOC RSS. Available at: <https://www.ingentaconnect.com/content/ben/cdr/2022/00000018/00000006/art00010> (Accessed: 19 August 2024).
- 3.Caroline, D., Terry, S. and Tonny, K. (2019) A focus on the Triangle of Wound Assessment — addressing the gap challenge and identifying suspected biofilm in clinical practice , A focus on the Triangle of Wound Assessment.
- 5.IWGDF Guidelines 2023 Available at : <https://iwgdfguidelines.org/wp-content/uploads/2023/07/IWGDF-2023-07-Wound-Healing-Guideline.pdf>

- Topical oxygen therapy is a promising intervention for chronic wounds, with observed improvements in all cases and some wounds achieving full closure.
 - The therapy’s benefit includes antimicrobial properties, angiogenesis promotion, and pain reduction. According to the latest IWGDF 2023 guidelines, topical oxygen therapy should be considered as an option for patients with chronic wounds, ultimately aiming to preserve limbs and improve quality of life.
- Topical oxygen therapy used in this case was Natrox oxygen therapy

